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&lt;210&gt; 5218

&lt;211&gt; 541

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5218

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		20						25					30		
Ser	Thr	Leu	Arg	Cys	Cys	Ser	Gly	Asn	Ser	Ser	Asp	Trp	Leu	Gly	Gly
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Ser	Pro	Gly	Ala	Ala	Pro	Gly	Thr	Leu	Cys	Cys	Phe	Leu	Trp	Pro	Arg
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Val	Gly	Thr	Gly	Leu	Cys	Pro	Gly	Leu	Ser	Leu	Pro	Gln	Pro	His	Leu
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Pro	His	Cys	Gln	Pro	Gln	Ser	Leu	Pro	Ala	Xaa	Ala	Arg	Val	Leu	Ser
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Ser	Ser	Glu	Thr	Pro	Ala	Arg	Thr	Leu	Pro	Phe	Thr	Thr	Gly	Leu	Ile
		100						105					110		
Tyr	Asp	Ser	Val	Met	Leu	Lys	His	Gln	Cys	Ser	Cys	Gly	Asp	Asn	Ser



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Gln Glu Arg Gly Leu Arg Ser Gln Cys Glu Cys Leu Arg Gly Arg Lys		
145	150	155
Ala Ser Leu Glu Glu Leu Gln Ser Val His Ser Glu Arg His Val Leu		
165	170	175
Leu Tyr Gly Thr Asn Pro Leu Ser Arg Leu Lys Leu Asp Asn Gly Lys		
180	185	190
Leu Ala Gly Leu Leu Ala Gln Arg Met Phe Val Met Leu Pro Cys Gly		
195	200	205
Gly Val Gly Val Asp Thr Asp Thr Ile Trp Asn Glu Leu His Ser Ser		
210	215	220
Asn Ala Ala Arg Trp Ala Ala Gly Ser Val Thr Asp Leu Ala Phe Lys		
225	230	235
Val Ala Ser Arg Glu Leu Lys Asn Gly Phe Ala Val Val Arg Pro Pro		
245	250	255
Gly His His Ala Asp His Ser Thr Ala Met Gly Phe Cys Phe Phe Asn		
260	265	270
Ser Val Ala Ile Ala Cys Arg Gln Leu Gln Gln Gln Ser Lys Ala Ser		
275	280	285
Lys Ile Leu Ile Val Asp Trp Asp Val His His Gly Asn Ala Thr Gln		
290	295	300
Gln Thr Phe Tyr Gln Asp Pro Ser Val Leu Tyr Ile Ser Leu His Arg		
305	310	315
His Asp Asp Gly Asn Phe Phe Pro Gly Ser Gly Ala Val Asp Glu Val		
325	330	335
Gly Ala Gly Ser Gly Glu Gly Phe Asn Val Asn Val Ala Trp Ala Gly		
340	345	350
Gly Leu Asp Pro Pro Met Gly Asp Pro Glu Tyr Leu Ala Ala Phe Arg		
355	360	365
Ile Val Val Met Pro Ile Ala Arg Glu Phe Ser Pro Asp Leu Val Leu		
370	375	380
Val Ser Ala Gly Phe Asp Ala Ala Glu Gly His Pro Ala Pro Leu Gly		
385	390	395
Gly Tyr His Val Ser Ala Lys Cys Phe Gly Tyr Met Thr Gln Gln Leu		
405	410	415
Met Asn Leu Ala Gly Gly Ala Val Val Leu Ala Leu Glu Gly Gly His		
420	425	430
Asp Leu Thr Ala Ile Cys Asp Ala Ser Glu Ala Cys Val Ala Ala Leu		
435	440	445
Leu Gly Asn Arg Val Asp Pro Leu Ser Glu Glu Gly Trp Lys Gln Lys		
450	455	460
Pro Asn Leu Asn Ala Ile Arg Ser Leu Glu Ala Val Ile Arg Val His		
465	470	475
Ser Lys Tyr Trp Gly Cys Met Gln Arg Leu Ala Ser Cys Pro Asp Ser		
485	490	495
Trp Val Pro Arg Val Pro Gly Ala Asp Lys Glu Glu Val Glu Ala Val		
500	505	510
Thr Ala Leu Ala Ser Leu Ser Val Gly Ile Leu Ala Glu Asp Arg Pro		
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<211> 1212  
<212> DNA  
<213> Homo sapiens

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120  
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180  
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240  
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1212

<210> 5220  
<211> 179  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 5220

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Val Pro Pro Glu Lys Leu Glu Gly Ala Gly Ser Ser Ser Ala Pro Glu
      20           25           30
Arg Asn Cys Val Gly Ser Ser Leu Pro Glu Ala Ser Pro Pro Ala Pro
      35           40           45
Glu Pro Ser Ser Pro Asn Ala Ala Val Pro Glu Ala Ile Pro Thr Pro
      50           55           60
Arg Ala Ala Ala Ser Ala Ala Leu Glu Leu Pro Leu Gly Pro Ala Pro
65           70           75           80
Val Ser Val Ala Pro Gln Ala Glu Ala Glu Ala Arg Ser Thr Pro Gly
      85           90           95
Pro Ala Gly Ser Arg Leu Gly Pro Glu Thr Phe Arg Gln Arg Phe Arg
      100          105          110
Gln Phe Arg Tyr Gln Asp Ala Ala Gly Pro Arg Glu Ala Phe Arg Gln
      115          120          125
Leu Arg Glu Leu Ser Arg Gln Trp Leu Arg Pro Asp Ile Arg Thr Lys
      130          135          140
Glu Gln Ile Val Glu Met Leu Val Gln Glu Gln Leu Leu Ala Ile Leu
145          150          155          160
Pro Glu Ala Ala Arg Ala Arg Arg Ile Arg Arg Arg Thr Asp Val Arg
      165          170          175
Ile Thr Gly

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&lt;210&gt; 5221

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5221

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120
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180
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497

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&lt;210&gt; 5222

&lt;211&gt; 112

&lt;212&gt; PRT

<213> Homo sapiens

<400> 5222

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 1           5           10           15
Ala Glu Pro Ala Ala Phe Gly Asp Thr Leu His Ile His Tyr Thr Gly
 20           25           30
Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg Asp Pro
 35           40           45
Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu Glu Gln
 50           55           60
Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile Ile Pro
 65           70           75           80
Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val Pro Gly
 85           90           95
Thr Lys Asp Asn Leu Met Arg Pro Pro Gly Met Thr Ser Ser Ser Gln
 100           105           110

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<210> 5223

<211> 637

<212> DNA

<213> Homo sapiens

<400> 5223

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tcagagaaga caggacgggg acagttgagg gaaggctgga gagatagtca tcagcctatc
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 360
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 420
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 480
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 540
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<210> 5224

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5224

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Xaa Thr Ile Phe Asp Asn Glu Ala Lys Asp Val Glu Arg Glu Val Cys

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Phe Ile Asp Ile Ala Cys Asp Glu Ile Pro Glu Arg Tyr Tyr Lys Glu
      20           25           30
Ser Glu Asp Pro Lys His Phe Lys Ser Glu Lys Thr Gly Arg Gly Gln
      35           40           45
Leu Arg Glu Gly Trp Arg Asp Ser His Gln Pro Ile Met Cys Ser Tyr
      50           55           60
Lys Leu Val Thr Val Lys Phe Glu Val Trp Gly Leu Gln Thr Arg Val
      65           70           75           80
Glu Gln Phe Val His Lys Val Val Arg Asp Ile Leu Leu Ile Gly His
      85           90           95
Arg Gln Ala Phe Ala Trp Val Asp Glu Trp Tyr Asp Met Thr Met Asp
      100          105          110
Asp Val Arg Glu Tyr Glu Lys Asn Met His Glu Gln Thr Asn Ile Lys
      115          120          125
Val Cys Asn Gln His Ser Ser Pro Val Asp Asp Ile Glu Ser His Ala
      130          135          140
Gln Thr Ser Thr
145

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&lt;210&gt; 5225

&lt;211&gt; 394

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5225

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120
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180
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240
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300
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360
ccccacatga aggttaggaa ccaagagaac ggcc
394

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&lt;210&gt; 5226

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5226

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Met Trp Gly Lys Gln Val Gln His Ser Pro Phe Val Thr Pro Leu Pro
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Glu Pro Thr Val Ser Ser His Pro Leu Gly Asp Gly Gln Ser Pro Arg
      20           25           30
Phe Ala Ser His Ile Pro Ala Asp Pro Pro Cys Leu Pro Pro Gly Leu
      35           40           45
Gly Gly Ala Val Ser Thr Gly Gly Gln Ala Ile Ala Pro Ser Asp Gln

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50						55						60					
Gly	Pro	Leu	Ser	Trp	Tyr	Tyr	Leu	Phe	Pro	Trp	Ala	Cys	Pro	Ser	Asp		
65					70					75					80		
Gln	Ala	Cys	Gln	Asp	Ser	Ala	Tyr	Val	Ser	Pro	Ser	Pro	Ser	Ser	Ala		
			85						90					95			
Leu	Gly	Pro	Ser	Leu	Pro	Gln	Pro	Gln	Leu	Pro	Pro	Pro	Gly	Ser	Pro		
			100					105						110			
Pro																	

&lt;210&gt; 5227

&lt;211&gt; 2366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5227

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 120  
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 180  
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 300  
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 360  
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 1080  
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 2160  
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 2366

<210> 5228  
 <211> 550  
 <212> PRT  
 <213> Homo sapiens

<400> 5228  
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    485                                      490                                      495  
 Lys Lys Thr Val Asp Glu Ser Ala Arg Ile Gln Arg Ala Tyr Asn His  
    500                                      505                                      510  
 Tyr Phe Asp Leu Ile Ile Ile Asn Asp Asn Leu Asp Lys Ala Phe Glu  
    515                                      520                                      525  
 Lys Leu Gln Thr Ala Ile Glu Lys Leu Arg Met Glu Pro Gln Trp Val  
    530                                      535                                      540  
 Pro Ile Ser Trp Val Tyr  
 545                                      550

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 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

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 Leu Val Leu Cys Gly Leu Arg Val Lys Lys Lys Arg Val Thr Arg Ser  
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 Glu Lys Asn Glu Glu Glu Lys Gln Leu His Arg Lys Arg Ala Val Ser  
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 Gln Val Pro Pro Thr Val Leu Cys Arg Glu Pro Val Gly Glu Ala Lys  
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845

<210> 5232

<211> 201

<212> PRT

<213> Homo sapiens

<400> 5232

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Ser	Pro	Val	Arg	Thr	Leu	Gln	Val	Glu	Thr	Leu	Val	Glu	Pro	Pro	Glu
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Glu	Gln	Ser	Leu	Leu	Asp	Met	Cys	Val	Gly	Glu	Lys	Arg	Arg	Ala	Ile
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Pro	Ala	Asp	Ala	Val	Val	Gln	Tyr	Asp	Val	Glu	Leu	Ile	Ala	Leu	Ile
	130					135					140				
Arg	Ala	Asn	Tyr	Trp	Leu	Lys	Leu	Val	Lys	Gly	Ile	Leu	Pro	Leu	Val
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			165					170					175		
Tyr	Arg	Lys	Ala	Asn	Arg	Pro	Lys	Val	Ser	Lys	Lys	Lys	Leu	Lys	Glu
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<210> 5233

<211> 2801

<212> DNA

<213> Homo sapiens

<400> 5233

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300

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1920

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 <212> PRT  
 <213> Homo sapiens

<400> 5234  
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&lt;210&gt; 5236

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5236

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Ala Glu Met Asp Leu Gly Thr Pro Thr Tyr Asp Glu Asn Pro Met Lys			
50	55	60	
Ala Ser Lys Lys Pro Lys Thr Ala Glu Ala Asp Thr Ser Ser Glu Leu			
65	70	75	80
Ala Lys Lys Ser Lys Glu Val Phe Arg Lys Glu Met Ser Gln Phe Ile			
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Val Gln Cys Leu Asn Pro Tyr Arg Lys Pro Asp Cys Lys Val Gly Arg			
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Ile Thr Thr Thr Glu Asp Phe Lys His Leu Ala Arg Lys Leu Thr His			
115	120	125	
Gly Val Met Asn Lys Glu Leu Lys Tyr Cys Lys Asn Pro Glu Asp Leu			
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Glu Cys Asn Glu Asn Val Lys His Lys Thr Lys Glu Tyr Ile Lys Lys			
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 <212> DNA  
 <213> Homo sapiens

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 1238

&lt;210&gt; 5238

&lt;211&gt; 212

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5238

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Pro	Arg	Pro	Gln	Ser	Glu	Glu	Asp	Leu	Ala	Ala	Leu	Phe	Glu	Ala	Ser
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Met	Lys	Leu	Tyr												
		210													

<210> 5239  
<211> 2061  
<212> DNA  
<213> Homo sapiens

<400> 5239  
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acaaccggtg tagaagaaaa taaatgggga gtgaaataga agaaaagatg agggagggga  
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420  
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1380  
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1440

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 1740  
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 1860  
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 2040  
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 2061

&lt;210&gt; 5240

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5240

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Ser	Pro	Ser	Trp	Leu	Val	Ser	Val	Leu	Pro	Thr	Ser	Leu	Leu	Ser	Leu
			20					25					30		
Ser	Ala	Gly	Gly	Thr	Pro	Ser	Gly	Cys	Thr	Val	Ala	Gly	Gly	Leu	Gly
		35					40					45			
Ala	Ser	Gly	Gly	Val	Gly	Ser	Thr	Gly	Thr	Gly	Ala	Ser	Pro	Pro	Thr
	50					55					60				
Thr	Val	Ala	Ile	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
65					70					75					80
Ser	Ser	Glu	Ser	Val	Ser	Leu	Gly	Gly	Ala	Trp	Gly	Gly	Pro	Gly	Gly
			85						90					95	
Gly	Ser	Leu	Ser	Pro	Arg	Ser	Ala	Phe	Phe	Asn	Phe	Arg	Phe	Leu	Leu
			100					105					110		
Phe	Leu	Ile	Arg	Asp	Leu	Phe	Ser	Pro	Ser	Pro	Gly	Val	Gly	Arg	Gly
		115					120					125			
Leu	Arg	Ser	Thr	Pro	Lys	Pro	Ala	Pro	Ala	Pro	Gly	Pro	Asn	Phe	Arg
		130					135					140			
Phe	Phe	Arg	Ser	Phe	Phe	Arg	Gly	Gly	Trp	Glu	Arg	Ser	Pro	Trp	Glu
145					150					155					160
Arg	Gly	Thr	Gly	Val	Arg	Ala	Ala	Gly	Gly	Arg	Glu	Val	Cys	Val	Arg
			165						170					175	
Asp	Val	Gly	Asp	Lys	Gly	Asp	Ala	Thr	Leu	Gly	Pro	Ser	Arg	Ser	Lys
			180						185				190		
Arg	Glu	Ser	Leu	Ser	Phe	Ile	Phe	Ser	Ser	Lys	Val	Ala	Leu	Ser	Gly

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 Ala Cys Arg Arg Glu Lys Val Asp Leu Gly Gly Pro Gly Trp Val Gly  
 210 215 220  
 Pro Ala  
 225

<210> 5241  
 <211> 461  
 <212> DNA  
 <213> Homo sapiens

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 120  
 cccaggtg atccggagcc ctcttcaccc ccgtccaggg ccgtttgcac tgctcccggc  
 180  
 atcggcacac cttgttctgg ttgtgctggg acggcagcgc cccgtgaggt cagaggggtg  
 240  
 ctgtcacatc tgccaccag tgtggtctcc tggagatttc agtggttcgg tgcttcgctt  
 300  
 ctcacctggc cagctctgag ttcagcctct cgctgtggg gaccctgca tcctggcggc  
 360  
 agaaggagga ggaagaagcc accagaggtt gccaggaacc cagtggcagg ggaggtgggg  
 420  
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 461

<210> 5242  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 5242  
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 Cys Arg Gly Cys Thr His Phe Gln Gly Met Thr Ala Gly Pro His Ser  
 20 25 30  
 Glu Pro Gln Ala Asp Pro Glu Pro Ser Ser Ser Pro Ser Arg Ala Val  
 35 40 45  
 Cys Thr Ala Pro Gly Ile Gly Thr Pro Cys Ser Gly Cys Ala Gly Thr  
 50 55 60  
 Ala Ala Pro Arg Glu Val Arg Gly Leu Leu Ser His Leu Pro Pro Ser  
 65 70 75 80  
 Val Val Ser Trp Arg Phe Gln Trp Phe Gly Ala Ser Leu Leu Thr Trp  
 85 90 95  
 Pro Ala Leu Ser Ser Ala Ser Arg Leu Trp Gly Pro Leu His Pro Gly  
 100 105 110  
 Gly Arg Arg Arg Arg Lys Lys Pro Pro Glu Val Ala Arg Asn Pro Val  
 115 120 125  
 Ala Gly Glu Val Gly Leu Ser Gln Ala Arg Pro Leu Cys Arg Glu Phe  
 130 135 140  
 Pro Arg

145

<210> 5243  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 5243  
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 tggctggacc ttacagacga gccatttggt cagaaggtaa ctgtggaccc tgacaactca  
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 180  
 agtcttgcta taagattcat ccttaccaat tacaacaagt tgtccatcca gagttggttt  
 240  
 agtttgcgcc gagtcgagat cattccaac aattcaatcc aagcagtcct taacccaact  
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 344

<210> 5244  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 5244  
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 Lys Asn Gln Thr Trp Leu Asp Leu Thr Asp Glu Pro Phe Gly Gln Lys  
 20 25 30  
 Val Thr Val Asp Pro Asp Asn Ser Asn Cys Ser Glu Glu Ser Ala Arg  
 35 40 45  
 Leu Ser Leu Lys Leu Gly Asp Ala Gly Asn Pro Arg Ser Leu Ala Ile  
 50 55 60  
 Arg Phe Ile Leu Thr Asn Tyr Asn Lys Leu Ser Ile Gln Ser Trp Phe  
 65 70 75 80  
 Ser Leu Arg Arg Val Glu Ile Ile Ser Asn Asn Ser Ile Gln Ala Val  
 85 90 95  
 Phe Asn Pro Thr Gly Val Tyr Ala Pro Ser Gly Tyr Ser Tyr Arg Cys  
 100 105 110  
 Gln Arg

<210> 5245  
 <211> 483  
 <212> DNA  
 <213> Homo sapiens

<400> 5245  
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 ctccggccgg ctaagccgcg ggggacaact atgctgaaag ccaagatcct cttcgtgggg  
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ccttgcgaga gtggaaaaac tgttttggcc aactttctga cagaatcttc tgacatcact  
 180  
 gaatacagcc caacccaagg agtgagggtt gagtcctgct ggccggccct gatgaaggat  
 240  
 gctcatggag tggatgatcgt cttcaatgct gacatcccaa gccaccggaa ggaaatggag  
 300  
 atgtggtatt cctgctttgt ccaacagccg tccttacagg acacacagtg tatgctaatt  
 360  
 gcacaccaca aaccaggctc tggagatgat aaaggaagcc tgtctttgtc gccacccttg  
 420  
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 480  
 ttc  
 483

<210> 5246  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 5246  
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 1 5 10 15  
 Thr Val Leu Ala Asn Phe Leu Thr Glu Ser Ser Asp Ile Thr Glu Tyr  
 20 25 30  
 Ser Pro Thr Gln Gly Val Arg Phe Glu Ser Cys Trp Pro Ala Leu Met  
 35 40 45  
 Lys Asp Ala His Gly Val Val Ile Val Phe Asn Ala Asp Ile Pro Ser  
 50 55 60  
 His Arg Lys Glu Met Glu Met Trp Tyr Ser Cys Phe Val Gln Gln Pro  
 65 70 75 80  
 Ser Leu Gln Asp Thr Gln Cys Met Leu Ile Ala His His Lys Pro Gly  
 85 90 95  
 Ser Gly Asp Asp Lys Gly Ser Leu Ser Leu Ser Pro Pro Leu Asn Lys  
 100 105 110  
 Leu Lys Leu Val His Ser Asn Leu Glu Asp Asp Pro Glu Glu Ile Arg  
 115 120 125  
 Met Glu Phe  
 130

<210> 5247  
 <211> 1004  
 <212> DNA  
 <213> Homo sapiens

<400> 5247  
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 120  
 ccttgcgaga gtggaaaaac tgttttggcc aactttctga cagaatcttc tgacatcact  
 180  
 gaatacagcc caacccaagg agtgaggatc ctagaatttg agaaccgcga tgttaccagc  
 240

aacaacaaag gcacgggctg tgaattcgag ctatgggact gtggtggcga tgctaagttt  
300  
gagtcctgct ggccggccct gatgaaggat gctcatggag tggatgatcgt cttcaatgct  
360  
gacatcccaa gccaccggaa ggaaatggag atgtgggtatt cctgctttgt ccaacagccg  
420  
tccttacagg acacacagtg tatgctaatt gcacaccaca aaccaggctc tggagatgat  
480  
aaaggaagcc tgtctttgtc gccacccttg aacaagctga agctggtgca ctcaaacctg  
540  
gaagatgacc ctgaggagat ccggatggaa ttcataaagt atttaaaaag cataatcaac  
600  
tccatgtctg agagcagaga cagggaggag atgtcaatta tgacctagcc agccttcacc  
660  
tgggactgcc acatccccag tgaaatcagc atgtttctcg gtgcagatct gaaatcacat  
720  
ccagctcctg atgttttctt ctccctctga ctgcagagga agtggttcta cctgcaggaa  
780  
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840  
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900  
tggagggatt taccacctca catatgtcca gttaaacagt ttgtggactt gtaaccgtcg  
960  
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1004

&lt;210&gt; 5248

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5248

Met	Leu	Lys	Ala	Lys	Ile	Leu	Phe	Val	Gly	Pro	Cys	Glu	Ser	Gly	Lys
1				5					10					15	
Thr	Val	Leu	Ala	Asn	Phe	Leu	Thr	Glu	Ser	Ser	Asp	Ile	Thr	Glu	Tyr
		20						25					30		
Ser	Pro	Thr	Gln	Gly	Val	Arg	Ile	Leu	Glu	Phe	Glu	Asn	Pro	His	Val
		35					40					45			
Thr	Ser	Asn	Asn	Lys	Gly	Thr	Gly	Cys	Glu	Phe	Glu	Leu	Trp	Asp	Cys
	50					55					60				
Gly	Gly	Asp	Ala	Lys	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met	Lys	Asp
65					70					75				80	
Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser	His	Arg
			85					90						95	
Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro	Ser	Leu
		100					105						110		
Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly	Ser	Gly
	115					120						125			
Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys	Leu	Lys
	130					135					140				
Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg	Met	Glu
145				150					155					160	
Phe	Ile	Lys	Tyr	Leu	Lys	Ser	Ile	Ile	Asn	Ser	Met	Ser	Glu	Ser	Arg

165 170 175  
 Asp Arg Glu Glu Met Ser Ile Met Thr  
 180 185  
 <210> 5249  
 <211> 653  
 <212> DNA  
 <213> Homo sapiens  
 <400> 5249  
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 120  
 gatgcagaga cccagcagct gctgaagaca gcactcaaag atccgggtgc tgtggacttg  
 180  
 gagaaagtgg ccaatgtgat tgtggacccat tctctgcagg actgtgtgtt cagcaaggaa  
 240  
 gcaggacgca tgtgctacgc catcattcag gcagagagta aacaagcagg ccagagtgtc  
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 420  
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 653

<210> 5250  
 <211> 217  
 <212> PRT  
 <213> Homo sapiens

<400> 5250  
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 Pro Val Lys Ser Tyr Arg Gly Trp Leu Val Met Gly Glu Pro Ser Arg  
 20 25 30  
 Glu Glu Tyr Lys Ile Gln Ser Phe Asp Ala Glu Thr Gln Gln Leu Leu  
 35 40 45  
 Lys Thr Ala Leu Lys Asp Pro Gly Ala Val Asp Leu Glu Lys Val Ala  
 50 55 60  
 Asn Val Ile Val Asp His Ser Leu Gln Asp Cys Val Phe Ser Lys Glu  
 65 70 75 80  
 Ala Gly Arg Met Cys Tyr Ala Ile Ile Gln Ala Glu Ser Lys Gln Ala  
 85 90 95  
 Gly Gln Ser Val Phe Arg Arg Gly Leu Leu Asn Arg Leu Gln Gln Glu  
 100 105 110  
 Tyr Gln Ala Arg Glu Gln Leu Arg Ala Arg Ser Leu Gln Gly Trp Val



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      115              120              125
Cys Tyr Val Thr Phe Ile Cys Asn Ile Phe Asp Tyr Leu Arg Val Asn
      130              135              140
Asn Met Pro Met Met Ala Leu Val Asn Pro Val Tyr Asp Cys Leu Phe
145              150              155              160
Arg Leu Ala Gln Pro Asp Ser Leu Ser Lys Glu Glu Glu Val Asp Cys
      165              170              175
Leu Val Leu Gln Leu His Arg Val Gly Glu Gln Leu Glu Lys Met Asn
      180              185              190
Gly Gln Arg Met Asp Glu Leu Phe Val Leu Ile Arg Asp Gly Phe Leu
      195              200              205
Leu Pro Thr Gly Leu Ser Ser Leu Ala
      210              215

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<210> 5251  
 <211> 372  
 <212> DNA  
 <213> Homo sapiens

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<400> 5251
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caccacagcg ggacggcact tcattatgac gatgtcccgt gcatcaacgg ctcggggggaa
120
ccggaagacg gctttcctgc tttctgcagc agaagcttgg gagaagaagg ggcttttgaa
180
aaccacaggcc tgtacgataa ctggccgcct ccgcacatct ttgcccgcta ctctcctgct
240
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tcgcagcctc ag
372

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<210> 5252  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

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<400> 5252
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Asn Gly Tyr Ala His Pro Ser Gly Thr Ala Leu His Tyr Asp Asp Val
      20              25              30
Pro Cys Ile Asn Gly Ser Gly Glu Pro Glu Asp Gly Phe Pro Ala Phe
      35              40              45
Cys Ser Arg Ser Leu Gly Glu Gly Ala Phe Glu Asn Pro Gly Leu
      50              55              60
Tyr Asp Asn Trp Pro Pro His Ile Phe Ala Arg Tyr Ser Pro Ala
65              70              75              80
Asp Arg Lys Ala Ser Arg Leu Ser Ala Asp Lys Leu Ser Ser Asn His
      85              90              95
Tyr Lys Tyr Pro Ala Ser Ala Gln Ser Val Thr Asn Thr Ser Ser Val

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 Gly Arg Ala Ser Leu Gly Leu Asn Ser Gln Pro Gln  
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<210> 5253  
 <211> 898  
 <212> DNA  
 <213> Homo sapiens

<400> 5253  
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 120  
 tcattctaat gccatccttg tggagagcca cagtgtagtg caagggtcca tccaattcac  
 180  
 tgtggacaag gtcttgagc aacatcacca ggctgccaag gctcagcaga aactacaggc  
 240  
 ctactctca gtggctgtga actccatcat gagtattctg actggaagca ctaggagcag  
 300  
 cttccgaaaag atgtgtctcc agacccttca agcagctgac acacaagagt tcaggaccaa  
 360  
 actgcacaaa gtatttcgtg agatcaccca acaccaattt cttcaccact gctcatgtga  
 420  
 ggtgaagcag cagctaaccc tagaaaaaaaa ggactcagcc cagggcactg aggacgcacc  
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 660  
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 720  
 ccgcctggag gacgtgctgt ggctgcagga ggtctccaac ctgtcagagt ggctgagtcc  
 780  
 cagccctggg ccctgagccg ggtccccttc cgcaagcgcc caccgatccg gaggtgcgg  
 840  
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 898

<210> 5254  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 5254  
 Gln Gln Pro Gly Ala Pro Ser Arg Tyr Gln Arg Ala Ser Arg Lys Gln  
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 Glu Ala Gln Glu Gly Gln Pro Pro His Arg Gly Asp Ala Ser Ser Ala  
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 Leu Cys Gln Gly Pro Glu Pro Val Arg Gly Arg Pro Ala Pro Pro Gly  
 35 40 45  
 Ser His Arg Gly Pro Pro His Ser

50

55

<210> 5255  
<211> 1410  
<212> DNA  
<213> Homo sapiens

<400> 5255  
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120  
tgtcaacaaa cctcaccact ggatcctgac aaccacaatg cctggatcct ggggccccca  
180  
tcactggatc ccagatcccc tcaactccacc cactggattc ctgcattggg ttttggtttt  
240  
ttgttttttt ttaacctcga cactgggtct cagatccttc tgctgactgc cagatccctg  
300  
catttcaagc actacgcctt ccacccccag gcaactggatc ccagattccc aagccttcac  
360  
ccaccagatt ctggctccta aaacaagtgc gggggcccca gtggcacagc aagtggatcc  
420  
tggcaactgc agctgctgga ttccagattc tgggtcccca atccctctgc ccagtcctc  
480  
aatgttgaaa cctcatctct tgaaggcaga tctgatatt ccaaggcact gaatcccaag  
540  
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840  
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<211> 95  
<212> PRT  
<213> Homo sapiens

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35 40 45  
Ala Ser Pro His Phe Thr Ala Ser Ser Ile Pro Leu Pro Pro Ser Arg  
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Arg Ile Val Pro Arg Ala Val Phe Leu Gln Gly Val Arg Gly Ile Thr  
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<210> 5257  
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<212> DNA  
<213> Homo sapiens

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<211> 375

<212> PRT

<213> Homo sapiens

<400> 5258

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Pro	Ile	Asn	Pro	Ser	Asp	Ile	Asn	Met	Ile	Gln	Gly	Asn	Tyr	Gly	Leu
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Ala	Ser	Asn	Ser	Gly	Val	Gly	Gln	Ala	Val	Ile	Gln	Ile	Ala	Ala	Ala
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Pro Gln Pro Arg Leu Ala Leu Asn Cys Val Gly Gly Lys Ser Ser Thr
      260              265              270
Glu Leu Leu Arg Gln Leu Ala Arg Gly Gly Thr Met Val Thr Tyr Gly
      275              280              285
Gly Met Ala Lys Gln Pro Val Val Ala Ser Val Ser Leu Leu Ile Phe
      290              295              300
Lys Asp Leu Lys Leu Arg Gly Phe Trp Leu Ser Gln Trp Lys Lys Asp
305              310              315              320
His Ser Pro Asp Gln Phe Lys Glu Leu Ile Leu Thr Leu Cys Asp Leu
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Ile Arg Arg Gly Gln Leu Thr Ala Pro Ala Cys Ser Gln Val Pro Leu
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Gln Asp Tyr Gln Ser Ala Leu Glu Ala Ser Met Lys Pro Phe Ile Ser
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Ser Lys Gln Ile Leu Thr Met
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&lt;210&gt; 5259

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5259

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306

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&lt;210&gt; 5260

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5260

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Met Thr Glu Glu Lys Thr Leu Thr Ala Glu Gly Leu Val Lys Leu Leu
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Gln Ala Val Lys Thr Thr Phe Pro Asn Leu Gly Leu Leu Leu Glu Lys
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Leu Gln Lys Ser Ala Thr Leu Pro Ser Thr Thr Val Gln Pro Ser Pro
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Asp Asp Tyr Gly Thr Glu Leu Leu Arg Arg Tyr His Glu Asn Leu Ser

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50	55	60
Glu Ile Phe Thr Asp Asn Gln Ile Leu Leu Lys Met Ile Ser His Met		
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&lt;210&gt; 5261

&lt;211&gt; 2394

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5261

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&lt;210&gt; 5262

&lt;211&gt; 275

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5262

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Ala	Glu	Arg	Pro	Leu	Gln	Asp	Glu	Pro	Ala	Ala	Ala	Ala	Ala	Gly	Pro
			20					25					30		
Gly	Lys	Gly	Arg	Phe	Leu	Val	Arg	Ile	Cys	Phe	Gln	Gly	Asp	Glu	Gly
		35					40					45			
Ala	Cys	Pro	Thr	Arg	Asp	Phe	Val	Val	Gly	Ala	Leu	Ile	Leu	Arg	Ser
	50					55					60				



Ile Gly Met Asp Pro Ser Asp Ile Tyr Ala Val Ile Gln Ile Pro Gly  
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 Phe Leu Arg Val Tyr Glu Glu Lys Arg Glu Gln Glu Asp Cys Trp Glu  
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 Asn Phe Val Val Leu Gly Arg Ser Lys Ser Ser Leu Lys Thr Leu Phe  
 115 120 125  
 Ile Leu Phe Arg Asn Glu Thr Val Asp Val Glu Asp Ile Val Thr Trp  
 130 135 140  
 Leu Lys Arg His Cys Asp Val Leu Ala Val Pro Val Lys Val Thr Asp  
 145 150 155 160  
 Arg Phe Gly Ile Trp Thr Gly Glu Tyr Lys Cys Glu Ile Glu Leu Arg  
 165 170 175  
 Gln Gly Glu Gly Gly Val Arg His Leu Pro Gly Ala Phe Phe Leu Gly  
 180 185 190  
 Ala Glu Arg Gly Tyr Ser Trp Tyr Lys Gly Gln Pro Lys Thr Cys Phe  
 195 200 205  
 Lys Cys Gly Ser Arg Thr His Met Ser Gly Ser Cys Thr Gln Asp Arg  
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 <212> PRT  
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<400> 5264

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 Cys Phe Leu Leu Ile Leu Pro Cys Gln Lys Ile Met Cys Ile Tyr  
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 100 105

&lt;210&gt; 5265

&lt;211&gt; 3203

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5265

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&lt;210&gt; 5266

&lt;211&gt; 853

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5266

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		20					25					30			
Glu	Glu	Ile	Leu	Pro	Glu	Pro	Gly	Ser	Glu	Thr	Pro	Thr	Val	Ala	Ser
		35				40					45				
Glu	Ala	Leu	Ala	Glu	Leu	Leu	His	Gly	Ala	Leu	Leu	Arg	Arg	Gly	Pro
		50				55				60					
Glu	Met	Gly	Tyr	Leu	Pro	Gly	Pro	Pro	Leu	Gly	Pro	Glu	Gly	Gly	Glu
65					70				75					80	
Glu	Glu	Thr	Thr	Thr	Thr	Ile	Ile	Thr	Thr	Thr	Thr	Val	Thr	Thr	Thr
			85					90					95		
Val	Thr	Ser	Pro	Val	Leu	Cys	Asn	Asn	Asn	Ile	Ser	Glu	Gly	Glu	Gly
			100				105					110			
Tyr	Val	Glu	Ser	Pro	Asp	Leu	Gly	Ser	Pro	Val	Ser	Arg	Thr	Leu	Gly
		115				120				125					
Leu	Leu	Asp	Cys	Thr	Tyr	Ser	Ile	His	Val	Tyr	Pro	Gly	Tyr	Gly	Ile
		130				135				140					
Glu	Ile	Gln	Val	Gln	Thr	Leu	Asn	Leu	Ser	Gln	Glu	Glu	Glu	Leu	Leu
145					150				155					160	
Val	Leu	Ala	Gly	Gly	Gly	Ser	Pro	Gly	Leu	Ala	Pro	Arg	Leu	Leu	Ala
			165					170					175		
Asn	Ser	Ser	Met	Leu	Gly	Glu	Gly	Gln	Val	Leu	Arg	Ser	Pro	Thr	Asn
			180				185					190			
Arg	Leu	Leu	Leu	His	Phe	Gln	Ser	Pro	Arg	Val	Pro	Arg	Gly	Gly	Gly

	195						200				205				
Phe	Arg	Ile	His	Tyr	Gln	Ala	Tyr	Leu	Leu	Ser	Cys	Gly	Phe	Pro	Pro
	210					215					220				
Arg	Pro	Ala	His	Gly	Asp	Val	Ser	Val	Thr	Asp	Leu	His	Pro	Gly	Gly
225					230					235					240
Thr	Ala	Thr	Phe	His	Cys	Asp	Ser	Gly	Tyr	Gln	Leu	Gln	Gly	Glu	Glu
				245					250						255
Thr	Leu	Ile	Cys	Leu	Asn	Gly	Thr	Arg	Pro	Ser	Trp	Asn	Gly	Glu	Thr
			260				265						270		
Pro	Ser	Cys	Met	Ala	Ser	Cys	Gly	Gly	Thr	Ile	His	Asn	Ala	Thr	Leu
		275					280					285			
Gly	Arg	Ile	Val	Ser	Pro	Glu	Pro	Gly	Gly	Ala	Val	Gly	Pro	Asn	Leu
	290					295					300				
Thr	Cys	Arg	Trp	Val	Ile	Glu	Ala	Ala	Glu	Gly	Arg	Arg	Leu	His	Leu
305					310					315					320
His	Phe	Glu	Arg	Val	Ser	Leu	Asp	Glu	Asp	Asn	Asp	Arg	Leu	Met	Val
				325					330					335	
Arg	Ser	Gly	Gly	Ser	Pro	Leu	Ser	Pro	Val	Ile	Tyr	Asp	Ser	Asp	Met
			340					345					350		
Asp	Asp	Val	Pro	Glu	Arg	Gly	Leu	Ile	Ser	Asp	Ala	Gln	Ser	Leu	Tyr
		355					360					365			
Val	Glu	Leu	Leu	Ser	Glu	Thr	Pro	Ala	Asn	Pro	Leu	Leu	Leu	Ser	Leu
	370					375					380				
Arg	Phe	Glu	Ala	Phe	Glu	Glu	Asp	Arg	Cys	Phe	Ala	Pro	Phe	Leu	Ala
385					390					395					400
His	Gly	Asn	Val	Thr	Thr	Thr	Asp	Pro	Glu	Tyr	Arg	Pro	Gly	Ala	Leu
				405					410					415	
Ala	Thr	Phe	Ser	Cys	Leu	Pro	Gly	Tyr	Ala	Leu	Glu	Pro	Pro	Gly	Pro
			420					425					430		
Pro	Asn	Ala	Ile	Glu	Cys	Val	Asp	Pro	Thr	Glu	Pro	His	Trp	Asn	Asp
		435					440					445			
Thr	Glu	Pro	Ala	Cys	Lys	Ala	Met	Cys	Gly	Gly	Glu	Leu	Ser	Glu	Pro
	450					455					460				
Ala	Gly	Val	Val	Leu	Ser	Pro	Asp	Trp	Pro	Gln	Ser	Tyr	Ser	Pro	Gly
465					470					475					480
Gln	Asp	Cys	Val	Trp	Gly	Val	His	Val	Gln	Glu	Glu	Lys	Arg	Ile	Leu
				485					490					495	
Leu	Gln	Val	Glu	Ile	Leu	Asn	Val	Arg	Glu	Gly	Asp	Met	Leu	Thr	Leu
			500					505					510		
Phe	Asp	Gly	Asp	Gly	Pro	Ser	Ala	Arg	Val	Leu	Ala	Gln	Leu	Arg	Gly
		515					520					525			
Pro	Gln	Pro	Arg	Arg	Arg	Leu	Leu	Ser	Ser	Gly	Pro	Asp	Leu	Thr	Leu
	530					535					540				
Gln	Phe	Gln	Ala	Pro	Pro	Gly	Pro	Pro	Asn	Pro	Gly	Leu	Gly	Gln	Gly
545															

625		630		635		640									
Ile	Ala	Asn	Gly	His	Arg	Thr	Ala	Ser	Asp	Ala	Gly	Phe	Pro	Val	Gly
		645						650						655	
Ser	His	Val	Gln	Tyr	Arg	Cys	Leu	Pro	Gly	Tyr	Ser	Leu	Glu	Gly	Ala
		660						665						670	
Ala	Met	Leu	Thr	Cys	Tyr	Ser	Arg	Asp	Thr	Gly	Thr	Pro	Lys	Trp	Ser
		675						680						685	
Asp	Arg	Val	Pro	Lys	Cys	Ala	Leu	Lys	Tyr	Glu	Pro	Cys	Leu	Asn	Pro
		690						695						700	
Gly	Val	Pro	Glu	Asn	Gly	Tyr	Gln	Thr	Leu	Tyr	Lys	His	His	Tyr	Gln
		705						710						715	
Ala	Gly	Glu	Ser	Leu	Arg	Phe	Phe	Cys	Tyr	Glu	Gly	Phe	Glu	Leu	Ile
				725						730					735
Gly	Glu	Val	Thr	Ile	Thr	Cys	Val	Pro	Gly	His	Pro	Ser	Gln	Trp	Thr
			740							745				750	
Ser	Gln	Pro	Pro	Leu	Cys	Lys	Val	Ala	Tyr	Glu	Glu	Leu	Leu	Asp	Asn
		755						760						765	
Arg	Lys	Leu	Glu	Val	Thr	Gln	Thr	Thr	Asp	Pro	Ser	Arg	Gln	Leu	Glu
		770						775						780	
Gly	Gly	Asn	Leu	Ala	Leu	Ala	Ile	Leu	Leu	Pro	Leu	Gly	Leu	Val	Ile
						790									800
Val	Leu	Gly	Ser	Gly	Val	Tyr	Ile	Tyr	Tyr	Thr	Lys	Leu	Gln	Gly	Lys
				805						810					815
Ser	Leu	Phe	Gly	Phe	Ser	Gly	Ser	His	Ser	Tyr	Ser	Pro	Ile	Thr	Val
			820					825						830	
Glu	Ser	Asp	Phe	Ser	Asn	Pro	Leu	Tyr	Glu	Ala	Gly	Asp	Thr	Arg	Glu
		835						840						845	
Tyr	Glu	Val	Ser	Ile											
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&lt;210&gt; 5267

&lt;211&gt; 885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5267

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120
attcccagtc ttcatttccc agccaccaa ggacatctca gcaacagagc cattatccga
180
gcccttctg ttagagaaat ttacatgaat gtacctgtag gggctgcggg agtgagagga
240
ctgggcggcc gtggctatctt ggcatacaca ggcctgggtc gaggatacca ggtcaaagga
300
gacaaaagag aagacaaact ctatgacatt ttacctggga tggagctcac cccaatgaat
360
cctgtcacat taaaaccca aggaattaaa ctgcgtcccc agatattaga agagatttgt
420
cagaaaaata actggggaca gccagtgtac cagctgcact ctgctattgg acaagaccaa
480
agacagctat tcttgtacaa aataactatt cctgctctag ccagccagaa tcctgcaatc
540

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caccctttca cacctccaaa gctgagtgcc tttgtggatg aagcaaagac gtatgcagcc  
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 660  
 gctgctgctg ctgctactgc tttcccagga tatgctgtcc ctaatgcaac tgcacccgtg  
 720  
 tctgcagccc agctcaagca agcggtaacc cttggacaag acttagcagc atatacaacc  
 780  
 tatgaggtct acccaacttt tgcagtgact gcccagggg atggatatgg caccttctga  
 840  
 agatgctttt ttaaatttaa gaataagaca cacaaaactc tatta  
 885

<210> 5268

<211> 279

<212> PRT

<213> Homo sapiens

<400> 5268

Phe	Gly	Thr	Arg	Gly	Thr	Met	Leu	Gln	Gly	Glu	Tyr	Thr	Tyr	Ser	Leu
1				5					10					15	
Gly	Gln	Val	Tyr	Asp	Pro	Thr	Thr	Thr	Tyr	Leu	Gly	Ala	Pro	Val	Phe
		20						25					30		
Tyr	Ala	Pro	Gln	Thr	Tyr	Ala	Ala	Ile	Pro	Ser	Leu	His	Phe	Pro	Ala
		35					40					45			
Thr	Lys	Gly	His	Leu	Ser	Asn	Arg	Ala	Ile	Ile	Arg	Ala	Pro	Ser	Val
	50					55					60				
Arg	Glu	Ile	Tyr	Met	Asn	Val	Pro	Val	Gly	Ala	Ala	Gly	Val	Arg	Gly
65					70					75				80	
Leu	Gly	Gly	Arg	Gly	Tyr	Leu	Ala	Tyr	Thr	Gly	Leu	Gly	Arg	Gly	Tyr
			85						90				95		
Gln	Val	Lys	Gly	Asp	Lys	Arg	Glu	Asp	Lys	Leu	Tyr	Asp	Ile	Leu	Pro
			100					105					110		
Gly	Met	Glu	Leu	Thr	Pro	Met	Asn	Pro	Val	Thr	Leu	Lys	Pro	Gln	Gly
		115					120					125			
Ile	Lys	Leu	Ala	Pro	Gln	Ile	Leu	Glu	Glu	Ile	Cys	Gln	Lys	Asn	Asn
	130					135					140				
Trp	Gly	Gln	Pro	Val	Tyr	Gln	Leu	His	Ser	Ala	Ile	Gly	Gln	Asp	Gln
145					150					155				160	
Arg	Gln	Leu	Phe	Leu	Tyr	Lys	Ile	Thr	Ile	Pro	Ala	Leu	Ala	Ser	Gln
			165						170					175	
Asn	Pro	Ala	Ile	His	Pro	Phe	Thr	Pro	Pro	Lys	Leu	Ser	Ala	Phe	Val
			180					185					190		
Asp	Glu	Ala	Lys	Thr	Tyr	Ala	Ala	Glu	Tyr	Thr	Leu	Gln	Thr	Leu	Gly
		195					200					205			
Ile	Pro	Thr	Asp	Gly	Gly	Asp	Gly	Thr	Met	Ala	Thr	Ala	Ala	Ala	Ala
	210					215					220				
Ala	Thr	Ala	Phe	Pro	Gly	Tyr	Ala	Val	Pro	Asn	Ala	Thr	Ala	Pro	Val
225					230					235				240	
Ser	Ala	Ala	Gln	Leu	Lys	Gln	Ala	Val	Thr	Leu	Gly	Gln	Asp	Leu	Ala
			245						250					255	
Ala	Tyr	Thr	Thr	Tyr	Glu	Val	Tyr	Pro	Thr	Phe	Ala	Val	Thr	Ala	Arg
			260					265						270	
Gly	Asp	Gly	Tyr	Gly	Thr	Phe									

275

&lt;210&gt; 5269

&lt;211&gt; 1177

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5269

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120  
aatgaacagt cacagaagac acaaaatata tccagctttg attctgagct gtttctagaa  
180  
gaactggatg aattgcctcc attgtctcca atgcagccaa tttcagagga agaggctatt  
240  
cagattattg cagaccctcc attgccacca gcttcattca cacttcgaga ctatgtggat  
300  
cattctgaga ctctgcagaa gttgggttctt ctaggcgtgg atttgtccaa gatagaaaaa  
360  
catccagaag cagcaaacct ccttctgaga ctggattttg aaaaagacat taagcaaattg  
420  
cttctgtttc ttaaagatgt gggatatagag gataaccaac tgggagcatt cctgacaaaa  
480  
aatcatgcaa ttttctctga agaccttgaa aatctgaaga ccagggtggc ttatctgcat  
540  
tcaaaaaatt tcagtaaagc agatgttgca cagatgggtca gaaaagcacc atttttgctg  
600  
aacttttcag tggaaagact ggataacaga ttgggatttt ttcagaaaga acttgaactt  
660  
agtgtgaaga agactagaga tctggtagtt cgtctcccaa ggctgctaac tggaagtctg  
720  
gaaccctgta aagaaaatat gaaggtttat cgtcttgaac ttggttttta acataacgaa  
780  
attcaacata tgatcaccag aatcccaaag atgttaactg caaataaaat gaaacttacc  
840  
gagacgtttg attttgtgca caatgtgatg agcattcccc accacatcat tgtcaagttc  
900  
ccacaggtat ttaatacaag gctgtttaag gtcaaagaaa gacacttggt tcttacctat  
960  
ttaggaagag cacagtatga tccagcaaaa cctaactaca tctctttgga caaactagta  
1020  
tctattcctg atgaaatatt ttgtgaagag attgccaaag catcagtaca ggactttgaa  
1080  
aaattcttaa aaacgcttta gatttttatg tatgttaaaa tgcagtattg taaagtgaat  
1140  
atatatatga ataaatgaat atatttttaa aaaaaaa  
1177

&lt;210&gt; 5270

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 5270

```

Met Asn Glu Gln Ser Gln Lys Thr Gln Asn Ile Ser Ser Phe Asp Ser
 1           5           10           15
Glu Leu Phe Leu Glu Glu Leu Asp Glu Leu Pro Pro Leu Ser Pro Met
          20           25           30
Gln Pro Ile Ser Glu Glu Glu Ala Ile Gln Ile Ile Ala Asp Pro Pro
          35           40           45
Leu Pro Pro Ala Ser Phe Thr Leu Arg Asp Tyr Val Asp His Ser Glu
          50           55           60
Thr Leu Gln Lys Leu Val Leu Leu Gly Val Asp Leu Ser Lys Ile Glu
          65           70           75           80
Lys His Pro Glu Ala Ala Asn Leu Leu Leu Arg Leu Asp Phe Glu Lys
          85           90           95
Asp Ile Lys Gln Met Leu Leu Phe Leu Lys Asp Val Gly Ile Glu Asp
          100          105          110
Asn Gln Leu Gly Ala Phe Leu Thr Lys Asn His Ala Ile Phe Ser Glu
          115          120          125
Asp Leu Glu Asn Leu Lys Thr Arg Val Ala Tyr Leu His Ser Lys Asn
          130          135          140
Phe Ser Lys Ala Asp Val Ala Gln Met Val Arg Lys Ala Pro Phe Leu
          145          150          155          160
Leu Asn Phe Ser Val Glu Arg Leu Asp Asn Arg Leu Gly Phe Phe Gln
          165          170          175
Lys Glu Leu Glu Leu Ser Val Lys Lys Thr Arg Asp Leu Val Val Arg
          180          185          190
Leu Pro Arg Leu Leu Thr Gly Ser Leu Glu Pro Val Lys Glu Asn Met
          195          200          205
Lys Val Tyr Arg Leu Glu Leu Gly Phe Lys His Asn Glu Ile Gln His
          210          215          220
Met Ile Thr Arg Ile Pro Lys Met Leu Thr Ala Asn Lys Met Lys Leu
          225          230          235          240
Thr Glu Thr Phe Asp Phe Val His Asn Val Met Ser Ile Pro His His
          245          250          255
Ile Ile Val Lys Phe Pro Gln Val Phe Asn Thr Arg Leu Phe Lys Val
          260          265          270
Lys Glu Arg His Leu Phe Leu Thr Tyr Leu Gly Arg Ala Gln Tyr Asp
          275          280          285
Pro Ala Lys Pro Asn Tyr Ile Ser Leu Asp Lys Leu Val Ser Ile Pro
          290          295          300
Asp Glu Ile Phe Cys Glu Glu Ile Ala Lys Ala Ser Val Gln Asp Phe
          305          310          315          320
Glu Lys Phe Leu Lys Thr Leu
          325

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&lt;210&gt; 5271

&lt;211&gt; 1185

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5271

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60
atagatgaaa atcaggatcg ctacattaag cctgttcaac tgcagcagcc acagaggggtg
120

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agcctggaat gtggcaacgt tacgggagcc tcttctccct caaggacacc ttttcagaat  
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 240  
 tctgcgtggc cggagaagag aggcgaaatc aggaggatga tggaaagttgc tgctgcagat  
 300  
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 360  
 ggctcggaga tcccgtccc tcctattctg ctcggcaggc tgggctccga cccacagaag  
 420  
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 480  
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 660  
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 780  
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 840  
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 900  
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 960  
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 1020  
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 1080  
 ccgtctctgt cctccatgg catcgaaggc gccttctctg ggtctggggc caagaccgtg  
 1140  
 attcccaaaa aggtggttgg caagttctcc atcaggctcg tgccg  
 1185

&lt;210&gt; 5272

&lt;211&gt; 385

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5272

Met	Ala	Ala	Leu	Thr	Leu	Phe	Lys	Tyr	Ile	Asp	Glu	Asn	Gln	Asp
1			5				10					15		
Arg	Tyr	Ile	Lys	Pro	Val	Gln	Leu	Gln	Pro	Gln	Arg	Val	Ser	Leu
			20				25				30			
Glu	Cys	Gly	Asn	Val	Thr	Gly	Ala	Ser	Ser	Pro	Ser	Arg	Thr	Pro
		35				40					45			
Gln	Asn	Pro	Ser	Leu	Leu	Leu	Val	His	Lys	Gln	Lys	Leu	Ala	Lys
		50				55				60				
Val	Ala	Ile	Gln	Ser	Val	Ser	Ala	Trp	Pro	Glu	Lys	Arg	Gly	Glu
65					70				75					80
Arg	Arg	Met	Met	Glu	Val	Ala	Ala	Ala	Asp	Val	Lys	Gln	Leu	Gly

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Ser Val Glu Leu Val Asp Ile Gly Lys Gln Lys Leu Pro Asp Gly Ser
      100                      105                      110
Glu Ile Pro Leu Pro Pro Ile Leu Leu Gly Arg Leu Gly Ser Asp Pro
      115                      120                      125
Gln Lys Lys Thr Val Cys Ile Tyr Gly His Leu Asp Val Gln Pro Ala
      130                      135                      140
Ala Leu Glu Asp Gly Trp Asp Ser Glu Pro Phe Thr Leu Val Glu Arg
      145                      150                      155                      160
Asp Gly Lys Leu Tyr Gly Arg Gly Ser Thr Asp Asp Lys Gly Pro Val
      165                      170                      175
Ala Gly Trp Ile Asn Ala Leu Glu Ala Tyr Gln Lys Thr Gly Gln Glu
      180                      185                      190
Ile Pro Val Asn Val Arg Phe Cys Leu Glu Gly Met Glu Glu Ser Gly
      195                      200                      205
Ser Glu Gly Leu Asp Glu Leu Ile Phe Ala Arg Lys Asp Thr Phe Phe
      210                      215                      220
Lys Asp Val Asp Tyr Val Cys Ile Ser Asp Asn Tyr Trp Leu Gly Lys
      225                      230                      235                      240
Lys Lys Pro Cys Ile Thr Tyr Gly Leu Arg Gly Ile Cys Tyr Phe Phe
      245                      250                      255
Ile Glu Val Glu Cys Ser Asn Lys Asp Leu His Ser Gly Val Tyr Gly
      260                      265                      270
Gly Ser Val His Glu Ala Met Thr Asp Leu Ile Leu Leu Met Gly Ser
      275                      280                      285
Leu Val Asp Lys Arg Gly Asn Ile Leu Ile Pro Gly Ile Asn Glu Ala
      290                      295                      300
Val Ala Ala Val Thr Glu Glu Glu His Lys Leu Tyr Asp Asp Ile Asp
      305                      310                      315                      320
Phe Asp Ile Glu Glu Phe Ala Lys Asp Val Gly Ala Gln Ile Leu Leu
      325                      330                      335
His Ser His Lys Lys Asp Ile Leu Met His Arg Trp Arg Tyr Pro Ser
      340                      345                      350
Leu Ser Leu His Gly Ile Glu Gly Ala Phe Ser Gly Ser Gly Ala Lys
      355                      360                      365
Thr Val Ile Pro Lys Lys Val Val Gly Lys Phe Ser Ile Arg Leu Val
      370                      375                      380
Pro
385

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&lt;210&gt; 5273

&lt;211&gt; 4580

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5273

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180
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240

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420  
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540  
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600  
gctgagggca ggctcctcat gcacgtcaac accaatgcc aacttctaca ggactccggc  
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720  
gaaagggctg ccgacttcat tgaccaggct ttgggtcaaa agaatggccg ggtgctcgtc  
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960  
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caaaggtgtc ccgagctgcc atgttttaga aacacactgt accctgctcc cagcatcaca  
1080  
aggcacttgt ctacaagtgt gtcccaacac agtcttgggc cactttcccc accctgggga  
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gcacataaag aagcttgcca aggggggctg ccttgctccc cagttgtcct gtttctgtaa  
1200  
cttatgatgt cttttccctg agatgggggc tcagaggggg aaggcctgtg gcctgcatgc  
1260  
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 4580

&lt;210&gt; 5274

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5274

Met	Ser	Gly	Ser	Phe	Glu	Leu	Ser	Val	Gln	Asp	Leu	Asn	Asp	Leu	Leu
1				5				10						15	
Ser	Asp	Gly	Ser	Gly	Cys	Tyr	Ser	Leu	Pro	Ser	Gln	Pro	Cys	Asn	Glu
			20					25					30		
Val	Thr	Pro	Arg	Ile	Tyr	Val	Gly	Asn	Ala	Ser	Val	Ala	Gln	Asp	Ile
			35				40						45		
Pro	Lys	Leu	Gln	Lys	Leu	Gly	Ile	Thr	His	Val	Leu	Asn	Ala	Ala	Glu
			50				55					60			
Gly	Arg	Ser	Phe	Met	His	Val	Asn	Thr	Asn	Ala	Asn	Phe	Tyr	Lys	Asp

65		70		75		80									
Ser	Gly	Ile	Thr	Tyr	Leu	Gly	Ile	Lys	Ala	Asn	Asp	Thr	Gln	Glu	Phe
				85					90					95	
Asn	Leu	Ser	Ala	Tyr	Phe	Glu	Arg	Ala	Ala	Asp	Phe	Ile	Asp	Gln	Ala
			100					105					110		
Leu	Ala	Gln	Lys	Asn	Gly	Arg	Val	Leu	Val	His	Cys	Arg	Glu	Gly	Tyr
		115				120					125				
Ser	Arg	Ser	Pro	Thr	Leu	Val	Ile	Ala	Tyr	Leu	Met	Met	Arg	Gln	Lys
	130					135					140				
Met	Asp	Val	Lys	Ser	Ala	Leu	Ser	Ile	Val	Arg	Gln	Asn	Arg	Glu	Ile
145					150					155					160
Gly	Pro	Asn	Asp	Gly	Phe	Leu	Ala	Gln	Leu	Cys	Gln	Leu	Asn	Asp	Arg
			165					170						175	
Leu	Ala	Lys	Glu	Gly	Lys	Leu	Lys	Pro							
		180						185							

<210> 5275  
 <211> 810  
 <212> DNA  
 <213> Homo sapiens

<400> 5275  
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 120  
 atgtcttgca tctaacgagg tgtgaccccc gaagccgagc gagctccgga ggaatttcag  
 180  
 tatctgctac ggtaacttca tcagcccgcc aagatggcga tgcaagcggc caagagggcg  
 240  
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 300  
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 360  
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 420  
 gccagaatg catgtgatca cctatcgga ttcaatgttt gtaacagata ccttgtggtt  
 480  
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 600  
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 660  
 taatactaaa tattgtgatt tcttatttga ggttcaaaat gacctgcttg aaactttgat  
 720  
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 780  
 tcgacgcggc cggcaattta gtagtagtag  
 810

<210> 5276  
 <211> 125  
 <212> PRT

<213> Homo sapiens

<400> 5276

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Met Ala Met Gln Ala Ala Lys Arg Ala Asn Ile Arg Leu Pro Pro Glu
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Val Asn Arg Ile Leu Tyr Ile Arg Asn Leu Pro Tyr Lys Ile Thr Ala
 20          25          30
Glu Glu Met Tyr Asp Ile Phe Gly Lys Tyr Gly Pro Ile Arg Gln Ile
 35          40          45
Arg Val Gly Asn Thr Pro Glu Thr Arg Gly Thr Ala Tyr Val Val Tyr
 50          55          60
Glu Asp Ile Phe Asp Ala Lys Asn Ala Cys Asp His Leu Ser Gly Phe
 65          70          75          80
Asn Val Cys Asn Arg Tyr Leu Val Val Leu Tyr Tyr Asn Ala Asn Arg
 85          90          95
Ala Phe Gln Lys Met Asp Thr Lys Lys Lys Glu Glu Gln Leu Lys Leu
100          105          110
Leu Lys Glu Lys Tyr Gly Ile Asn Thr Asp Pro Pro Lys
115          120          125

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<210> 5277

<211> 612

<212> DNA

<213> Homo sapiens

<400> 5277

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120
accctgtccc tgcccttcta catctcccag tgctggaccc tcggctccgt cctggcgctc
180
acctggaccg tctggcgctt cttcctgcgg gacatcacat tgaggtacaa ggagaccg
240
tggcagaagt ggcagaacaa ggatgaccag ggcagcaccg tcggcaacgg ggaccagcac
300
ccaactggggc tggacgaaga cctgctgggg cctgggggtgg ccgagggcga gggagcacca
360
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420
gcctcctcct gtgtgagtec caccaggagc cacgtgcccg gccttgccct caagggtttt
480
tgcttttctc ctgtgcacct ggcgaggctg aaggcgaggg gtggaggagg ccccagcaca
540
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600
tgtgtgtacg tg
612

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<210> 5278

<211> 123

<212> PRT

<213> Homo sapiens



&lt;400&gt; 5278

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Ile Tyr Asp Phe Met Asp Asp Pro Lys Pro His Lys Lys Leu Gly Pro
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Gln Ala Trp Leu Val Ala Ala Ile Thr Ala Thr Glu Leu Leu Ile Val
20           25           30
Val Lys Tyr Asp Pro His Thr Leu Thr Leu Ser Leu Pro Phe Tyr Ile
35           40           45
Ser Gln Cys Trp Thr Leu Gly Ser Val Leu Ala Leu Thr Trp Thr Val
50           55           60
Trp Arg Phe Phe Leu Arg Asp Ile Thr Leu Arg Tyr Lys Glu Thr Arg
65           70           75           80
Trp Gln Lys Trp Gln Asn Lys Asp Asp Gln Gly Ser Thr Val Gly Asn
85           90           95
Gly Asp Gln His Pro Leu Gly Leu Asp Glu Asp Leu Leu Gly Pro Gly
100          105          110
Val Ala Glu Gly Glu Gly Ala Pro Thr Pro Asn
115          120

```

&lt;210&gt; 5279

&lt;211&gt; 1225

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5279

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120
ctactcccta agctgattgc aggtggccac aaagtactca tcttctccca gatggtgcgc
180
tgcctcgaca tcctagaaga ttatttaatc cagagaagat acacctatga acgtattgat
240
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300
gaccgctttg tcttcttact gtgcaccaga gcgggaggcc tggggatcaa tctcacagct
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420
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720
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780
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900

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1225

<210> 5280  
<211> 408  
<212> PRT  
<213> Homo sapiens

<400> 5280  
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Gly Lys Leu Val Leu Ile Asp Lys Leu Leu Pro Lys Leu Ile Ala Gly  
35 40 45  
Gly His Lys Val Leu Ile Phe Ser Gln Met Val Arg Cys Leu Asp Ile  
50 55 60  
Leu Glu Asp Tyr Leu Ile Gln Arg Arg Tyr Thr Tyr Glu Arg Ile Asp  
65 70 75 80  
Gly Arg Val Arg Gly Asn Leu Arg Gln Ala Ala Ile Asp Arg Phe Ser  
85 90 95  
Lys Pro Asp Ser Asp Arg Phe Val Phe Leu Leu Cys Thr Arg Ala Gly  
100 105 110  
Gly Leu Gly Ile Asn Leu Thr Ala Ala Asp Thr Cys Ile Ile Phe Asp  
115 120 125  
Ser Asp Trp Asn Pro Gln Asn Asp Leu Gln Ala Gln Ala Arg Cys His  
130 135 140  
Arg Ile Gly Gln Ser Lys Ala Val Lys Val Tyr Arg Leu Ile Thr Arg  
145 150 155 160  
Asn Ser Tyr Glu Arg Glu Met Phe Asp Lys Ala Ser Leu Lys Leu Gly  
165 170 175  
Leu Asp Lys Ala Val Leu Gln Thr Ser Thr Glu Arg Ala Ala Pro Met  
180 185 190  
Gly Thr Ala Leu Ser Lys Met Glu Val Glu Asp Leu Leu Arg Lys Gly  
195 200 205  
Ala Tyr Gly Ala Leu Met Asp Glu Glu Asp Glu Gly Ser Lys Phe Cys  
210 215 220  
Glu Glu Asp Ile Asp Gln Ile Leu Gln Arg Arg Thr His Thr Ile Thr  
225 230 235 240  
Ile Gln Ser Glu Gly Lys Gly Ser Thr Phe Ala Lys Ala Ser Phe Val  
245 250 255  
Ala Ser Gly Asn Arg Thr Asp Ile Ser Leu Asp Asp Pro Asn Phe Trp  
260 265 270  
Gln Lys Trp Ala Lys Ile Ala Glu Leu Asp Thr Glu Ala Lys Asn Glu

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      275              280              285
Lys Glu Ser Leu Val Ile Asp Arg Pro Arg Val Arg Lys Gln Thr Lys
  290              295              300
His Tyr Asn Ser Phe Glu Glu Asp Glu Leu Met Glu Phe Ser Glu Leu
  305              310              315              320
Asp Ser Asp Ser Asp Glu Arg Pro Thr Arg Ser Arg Arg Leu Asn Asp
      325              330              335
Lys Ala Arg Arg Tyr Leu Arg Ala Glu Cys Phe Arg Val Glu Lys Asn
      340              345              350
Leu Leu Ile Phe Gly Trp Gly Arg Trp Lys Asp Ile Leu Thr His Gly
      355              360              365
Arg Phe Lys Trp His Leu Asn Glu Lys Asp Met Glu Met Ile Cys Arg
      370              375              380
Ala Leu Leu Val Tyr Cys Val Lys His Tyr Lys Gly Asp Glu Lys Ile
  385              390              395              400
Lys Ser Phe Ile Trp Glu Leu Ile
      405

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&lt;210&gt; 5281

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5281

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120
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180
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240
aagttgcaca tgtcctcacc aaacctggag cagatcacga ttgggaaaac ctagagaaaag
300
acttgagatt gctcattaat ggggattatg aagaag
336

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&lt;210&gt; 5282

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5282

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Met Gln Thr Ala Gln Asn Lys Tyr Gln Glu Leu Lys Asn Ile Cys Ser
  1              5              10              15
Tyr Arg Ala Gln Ala Phe Leu Val Leu Thr Gly Leu Thr Ala Thr Val
      20              25              30
Gly Asp Thr Ala Ile Ser Ser Glu Lys Thr Gln Arg Met Ser Leu
      35              40              45
Met Arg His His Met Gly Gln Ser Leu Ser Lys Glu Val Ala His Val
      50              55              60
Leu Thr Lys Pro Gly Ala Asp His Asp Trp Glu Asn Leu Glu Lys Asp
      65              70              75              80
Leu Arg Leu Leu Ile Asn Gly Asp Tyr Glu Glu

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85

90

&lt;210&gt; 5283

&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5283

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120  
atggatggca tcattgaaca gaagagcatg ctggtgcaca gtaaaatcag tgatgctggc  
180  
aagaggaatg gtttaattaa caccagaaac ttgatggccg agagcagaga tggctctggtg  
240  
tctgtttacc cagcgcccca gtaccagagc caccgggtgg gggccagcac agtgccggcc  
300  
agcctggaca gcagcaggag tgagccgatg cagcagctgc tggaccccaa caccctgcag  
360  
cagtcagtgg agtcccgcta ccggcccaac atcatcctct attcagaggg cgtgctgcgc  
420  
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480  
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540  
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720  
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1380

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 1860  
 cttcatgctg cttaagttac cagatgaatg ctgagaaata agtaatcaca gacatttta  
 1920  
 taccatttca ttgctgtttt acgagtgttc attacttaac aaaaaattat cttttagctt  
 1980  
 tttcgctta  
 1989

&lt;210&gt; 5284

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5284

Met	Asp	Gly	Ile	Ile	Glu	Gln	Lys	Ser	Met	Leu	Val	His	Ser	Lys	Ile
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Ser	Asp	Ala	Gly	Lys	Arg	Asn	Gly	Leu	Ile	Asn	Thr	Arg	Asn	Leu	Met
		20						25					30		
Ala	Glu	Ser	Arg	Asp	Gly	Leu	Val	Ser	Val	Tyr	Pro	Ala	Pro	Gln	Tyr
	35					40					45				
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Gln	Ser	Val	Glu	Ser	Arg	Tyr	Arg	Pro	Asn	Ile	Ile	Leu	Tyr	Ser	Glu
		85						90					95		
Gly	Val	Leu	Arg	Ser	Trp	Gly	Asp	Gly	Val	Ala	Ala	Asp	Cys	Cys	Glu
	100					105						110			
Thr	Thr	Phe	Ile	Glu	Asp	Arg	Ser	Pro	Thr	Lys	Asp	Ser	Leu	Glu	Tyr
	115					120						125			
Pro	Asp	Gly	Lys	Phe	Ile	Asp	Leu	Ser	Ala	Asp	Asp	Ile	Lys	Ile	His
	130				135					140					
Thr	Leu	Ser	Tyr	Asp	Val	Glu	Glu	Glu	Glu	Phe	Gln	Glu	Leu	Glu	
145				150				155						160	
Ser	Asp	Tyr	Ser	Ser	Asp	Thr	Glu	Ser	Glu	Asp	Asn	Phe	Leu	Met	Met
		165						170					175		
Pro	Pro	Arg	Asp	His	Leu	Gly	Leu	Ser	Val	Phe	Ser	Met	Leu	Cys	Cys
	180					185						190			
Phe	Trp	Pro	Leu	Gly	Ile	Ala	Ala	Phe	Tyr	Leu	Ser	His	Glu	Thr	Asn

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Tyr	Val	Gly	Val	Ala	Val	Ala	Leu	Ile	Ala	Tyr	Leu	Ser	Lys	Asn	Asn	
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<212> DNA
<213> Homo sapiens
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300						
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360						
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420						
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&lt;210&gt; 5286

&lt;211&gt; 628

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5286

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			20					25					30		
Asp	Glu	Asp	Asp	Glu	Asp	Tyr	Val	Pro	Tyr	Val	Pro	Leu	Arg	Gln	Arg
		35				40						45			
Arg	Gln	Leu	Leu	Leu	Gln	Lys	Leu	Leu	Gln	Arg	Arg	Arg	Lys	Gly	Ala
	50				55					60					
Ala	Glu	Glu	Glu	Gln	Gln	Asp	Ser	Gly	Ser	Glu	Pro	Arg	Gly	Asp	Glu
65					70				75					80	
Asp	Asp	Ile	Pro	Leu	Gly	Pro	Gln	Ser	Asn	Val	Ser	Leu	Leu	Asp	Gln
			85					90						95	
His	Gln	His	Leu	Lys	Glu	Lys	Ala	Glu	Ala	Arg	Lys	Glu	Ser	Ala	Lys

4456



530                      535                      540  
 Ala Cys Asp Glu Ser Val Leu Met Asp Leu Lys Ala Leu Leu Leu Glu  
 545                      550                      555  
 Ala Lys Gln Lys Val Pro Pro Val Leu Gln Val Leu His Cys Gly Asp  
                     565                      570                      575  
 Glu Ser Met Leu Asp Ile Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly  
                     580                      585                      590  
 Gly Leu Gly His Arg Ile Thr Asp Cys Pro Lys Leu Glu Ala Met Gln  
                     595                      600                      605  
 Thr Lys Gln Val Ser Asn Ile Gly Arg Lys Asp Tyr Leu Ala His Ser  
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 Ser Met Asp Phe  
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<210> 5287  
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 <212> DNA  
 <213> Homo sapiens

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 420  
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<210> 5288  
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 <212> PRT  
 <213> Homo sapiens

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 Glu Pro Pro Ala Ser Pro Ala Pro His Ser Ile Pro Thr Gly Trp Gly  
                     20                      25                      30  
 Arg Ala Arg Cys Gly Cys Val Gly Ser Gly Ala Glu Leu Gln Asn Pro  
                     35                      40                      45  
 Arg Thr His Phe Val Leu Ser Pro His Cys Phe Met Gly Gly Ile Met

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      50              55              60
Ala Pro Lys Asp Ile Met Thr Asn Thr His Ala Lys Ser Ile Leu Asn
65              70              75              80
Ser Met Asn Ser Leu Arg Lys Ser Asn Thr Leu Cys Asp Val Thr Leu
      85              90              95
Arg Val Glu Gln Lys Asp Phe Pro Ala His Arg Ile Val Leu Ala Ala
      100              105              110
Cys Ser Asp Tyr Phe Cys Ala Met Phe Thr Ser Glu Leu Ser Glu Lys
      115              120              125
Gly Lys Pro Tyr Val Asp Ile Gln Gly Leu Thr Ala Ser Thr Met Glu
      130              135              140
Ile Leu Leu Asp Phe Val Tyr Thr Glu Thr Val His Val Thr Val Glu
145              150              155              160
Asn Val Gln Glu Leu Leu Pro Ala Ala Cys Leu Leu Gln Leu Lys Gly
      165              170              175
Val Lys Gln Ala Cys Cys Glu Phe Leu Glu Ser Gln Leu Asp Pro Ser
      180              185              190
Arg

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&lt;210&gt; 5289

&lt;211&gt; 361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5289

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180
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240
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360
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361

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&lt;210&gt; 5290

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5290

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Met Leu Ser Tyr Tyr Arg Thr Met Glu Trp His Glu Lys His Asp Asn
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Glu Asp Thr Ala Ser Ala Ser Glu Gly Glu Val Tyr Asp Arg Val Leu
      20              25              30
Lys Lys Leu Ile Leu Ile Gly Ala Thr Leu Lys Lys Lys Leu Glu His
      35              40              45
Gly Leu Thr Arg Ile Trp Gln Asp Val Gln Leu Lys Val Lys Thr Tyr

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50		55		60											
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65		70		75		80									
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 <211> 767  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
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 240  
 aactgcctg ccacctgccg tttaccaccc atggtggctt ctgtggctgg tgggctccaa  
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 660  
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<210> 5292  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

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 Thr Pro Val Leu Pro Pro Thr Leu Pro Ala Thr Cys Arg Leu Pro Pro  
 35 40 45  
 Met Val Ala Ser Val Ala Gly Gly Leu Gln Ala Gly Leu Asp Gly Glu  
 50 55 60  
 Ser Arg Gly Trp Ser Gly Gly Arg Gly Gln Pro His Pro Gly Gly Ala

65					70					75				80
Arg	Gly	Gln	Arg	His	Thr	Val	Ala	Ala	Pro	Ala	Xaa	Arg	Ala	Arg
				85					90					95
Gly	Ala	Glu	Pro	His	Ala	Ala	Ala	Ala	Pro	Arg	Arg	Leu	Pro	His
			100					105				110		
Pro	Pro	Pro	Arg	Ala	Gly	His	Pro	Ala	Pro	Gln	Leu	Ala	Gly	Trp
		115				120				125				
Gln	Ala	Pro	Arg	Leu	Lys	Arg	Thr	Val	Pro	Val	Arg	Arg	Ser	
	130					135				140				

&lt;210&gt; 5293

&lt;211&gt; 1428

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5293

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180
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240
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gaaaaaacca aaattatcgc caagattcag caaaggggac agggagctcc agcccagag
1020
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1140

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 1320  
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 1428

<210> 5294  
 <211> 290  
 <212> PRT  
 <213> Homo sapiens

<400> 5294  
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 Arg Val Tyr Asn Gly Arg Leu Lys Val Gln Arg Leu Cys Ser Glu Met  
 35 40 45  
 Glu Glu Leu Ala Glu His Gly Ile Phe Leu Pro Pro Asn Met Gln Gly  
 50 55 60  
 Leu Thr Asp Asp Gln Ile Glu Glu Leu Lys Leu Lys Asp Glu Trp Gly  
 65 70 75 80  
 Glu Lys Cys Val Pro Ser Gly Gly Ala Val Phe Lys Lys Asp Asp Ile  
 85 90 95  
 Gly Arg Arg Asn Gly Gln Ala Pro Asn Glu Lys Met Lys Gln Val Leu  
 100 105 110  
 Lys Lys Thr Ile Glu Glu Ala Lys Ala Ile Ile Ser Lys Lys Gln Val  
 115 120 125  
 Glu Ala Gly Val Cys Val Thr Met Glu Met Val Lys Asp Ala Leu Asp  
 130 135 140  
 Gln Leu Arg Gly Ala Val Met Ile Val Tyr Pro Met Gly Leu Pro Pro  
 145 150 155 160  
 Tyr Asp Pro Ile Arg Met Glu Phe Glu Asn Lys Glu Asp Leu Ser Gly  
 165 170 175  
 Thr Gln Ala Gly Leu Asn Val Ile Lys Glu Ala Glu Ala Gln Leu Trp  
 180 185 190  
 Trp Ala Ala Lys Glu Leu Arg Arg Thr Lys Lys Leu Ser Asp Tyr Val  
 195 200 205  
 Gly Lys Asn Glu Lys Thr Lys Ile Ile Ala Lys Ile Gln Gln Arg Gly  
 210 215 220  
 Gln Gly Ala Pro Ala Arg Glu Pro Ile Ile Ser Ser Glu Glu Gln Lys  
 225 230 235 240  
 Gln Leu Met Leu Tyr Tyr His Arg Arg Gln Glu Glu Leu Lys Arg Leu  
 245 250 255  
 Glu Glu Asn Asp Asp Ala Tyr Leu Asn Ser Pro Trp Ala Asp Asn  
 260 265 270  
 Thr Ala Leu Lys Arg His Phe His Gly Val Lys Asp Ile Lys Trp Arg  
 275 280 285  
 Pro Arg

290

&lt;210&gt; 5295

&lt;211&gt; 1451

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5295

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120  
gacagtaacg agcagtgtctg gccgggcccc actttcagag ggggcggaag ggcattctga  
180  
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gccctcctga gtaaagagtg gccacgaagg gctgctaggc agcacctact cttggaatca  
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420  
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1200  
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1320  
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 1451

<210> 5296  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

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 Leu Asp Thr Lys Arg Asn Gln Asn Arg Glu Gly Leu Arg Ala Leu Gln  
 35 40 45  
 Lys Asp Leu Ser Leu Ser Glu Asp Val Met Val Cys Phe Gly Asn Met  
 50 55 60  
 Phe Ile Lys Met Pro His Pro Glu Thr Lys Glu Met Ile Glu Lys Asp  
 65 70 75 80  
 Gln Asp His Leu Asp Lys Glu Ile Glu Lys Leu Arg Lys Gln Leu Lys  
 85 90 95  
 Val Lys Val Asn Arg Leu Phe Glu Ala Gln Gly Lys Pro Glu Leu Lys  
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 Gly Phe Asn Leu Asn Pro Leu Asn Gln Asp Glu Leu Lys Ala Leu Lys  
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 Val Ile Leu Lys Gly  
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<210> 5297  
 <211> 5318  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5298

&lt;211&gt; 663

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5298

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&lt;210&gt; 5302

&lt;211&gt; 1339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5302

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Ala	Trp	Thr	Ala	Pro	Ser	Thr	Ser	Gln	Lys	Cys	Asp	Glu	Pro	Leu	Val
		35					40				45				
Ser	Gly	Leu	Pro	His	Val	Ala	Phe	Ser	Ser	Ser	Ser	Ser	Ile	Ser	Gly

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Gly Trp Ser Pro Ser	Asp Ser Asp His Tyr	Gln Trp Leu Gln Val Asp
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Phe Gly Asn Arg Lys	Gln Ile Ser Ala Ile	Ala Thr Gln Gly Arg Tyr
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Ser Ser Ser Asp Trp	Val Thr Gln Tyr Arg	Met Leu Tyr Ser Asp Thr
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Gly Arg Asn Trp Lys	Pro Tyr His Gln Asp	Gly Asn Ile Trp Ala Phe
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Pro Gly Asn Ile Asn	Ser Asp Gly Val Val	Arg His Glu Leu Gln His
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Pro Ile Ile Ala Arg	Tyr Val Arg Ile Val	Pro Leu Asp Trp Asn Gly
165	170	175
Glu Gly Arg Ile Gly	Leu Arg Ile Glu Val	Tyr Gly Cys Ser Tyr Trp
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Ala Asp Val Ile Asn	Phe Asp Gly His Val	Val Leu Pro Tyr Arg Phe
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Arg Asn Lys Lys Met	Lys Thr Leu Lys Asp	Val Ile Ala Leu Asn Phe
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225	230	235
Gly Asp Tyr Ile Thr	Leu Glu Leu Lys Lys	Ala Lys Leu Val Leu Ser
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260	265	270
Val Met Thr Gly Ser	Leu Leu Asp Asp His	His Trp His Ser Val Val
275	280	285
Ile Glu Arg Gln Gly	Arg Ser Ile Asn Leu	Thr Leu Asp Arg Ser Met
290	295	300
Gln His Phe Arg Thr	Asn Gly Glu Phe Asp	Tyr Leu Asp Leu Asp Tyr
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Glu Ile Thr Phe Gly	Gly Ile Pro Phe Ser	Gly Lys Pro Ser Ser Ser
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Ser Arg Lys Asn Phe	Lys Gly Cys Met Glu	Ser Ile Asn Tyr Asn Gly
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Val Gly Asn Leu Ser	Phe Ser Cys Val Glu	Pro Tyr Thr Val Pro Val
370	375	380
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385	390	395
Asp Leu Phe Ser Val	Ser Phe Gln Phe Arg	Thr Trp Asn Pro Asn Gly
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420	425	430
Asp Leu Thr Glu Ser	Lys Val Gly Val His	Ile Asn Ile Thr Gln Thr
435	440	445
Lys Met Ser Gln Ile	Asp Ile Ser Ser Gly	Ser Gly Leu Asn Asp Gly
450	455	460
Gln Trp His Glu Val	Arg Phe Leu Ala Lys	Glu Asn Phe Ala Ile Leu
465	470	475
Thr Ile Asp Gly Asp	Glu Ala Ser Ala Val	Arg Thr Asn Ser Pro Leu

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 675 680 685  
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 Asn Thr Pro Asp Gly Ser Pro Tyr Thr Trp Trp Val Gly Lys Ala Asn  
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 Ala Cys Gly Ile Glu Arg Asn Cys Thr Asp Pro Lys Tyr Tyr Cys Asn  
 740 745 750  
 Cys Asp Ala Asp Tyr Lys Gln Trp Arg Lys Asp Ala Gly Phe Leu Ser  
 755 760 765  
 Tyr Lys Asp His Leu Pro Val Ser Gln Val Val Val Gly Asp Thr Asp  
 770 775 780  
 Arg Gln Gly Ser Glu Ala Lys Leu Ser Val Gly Pro Leu Arg Cys Gln  
 785 790 795 800  
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 Tyr Leu His Phe Ser Thr Phe Gln Gly Glu Thr Ser Ala Asp Ile Ser  
 820 825 830  
 Phe Tyr Phe Lys Thr Leu Thr Pro Trp Gly Val Phe Leu Glu Asn Met  
 835 840 845  
 Gly Lys Glu Asp Phe Ile Lys Leu Glu Leu Lys Ser Ala Thr Glu Val  
 850 855 860  
 Ser Phe Ser Phe Asp Val Gly Asn Gly Pro Val Glu Ile Val Val Arg  
 865 870 875 880  
 Ser Pro Thr Pro Leu Asn Asp Asp Gln Trp His Arg Val Thr Ala Glu  
 885 890 895  
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**4476.**

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 <211> 334  
 <212> DNA  
 <213> Homo sapiens

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 Glu Gly Leu Ala Asp Ser Gly Pro Gly Gly Ala Gly Arg Pro Ala Ala  
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 <213> Homo sapiens

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&lt;210&gt; 5308

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5308

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			20					25					30		
Asp	His	His	Arg	Gly	His	Gly	Pro	Thr	Ser	Val	Ile	Trp	Glu	Thr	Gly
			35				40					45			
Leu	Gly	Arg	Gly	Gly	Asp	Phe	Pro	Lys	Ser	Pro	Ser	Ile	His	Asp	Arg
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65					70				75					80	
Ser	Leu	Cys	Tyr	Pro	Gln	Ile	His	Lys	Leu	Arg	Ile	Thr	Cys	Ile	His
			85					90					95		
Phe	Pro	Pro	Pro	Trp	Thr	Leu	Cys	Phe	Glu	Leu	Phe	Cys	Leu	Pro	Asp
			100					105					110		

&lt;210&gt; 5309

&lt;211&gt; 2078

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5309

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&lt;210&gt; 5310

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5310

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			20					25					30		
Thr	Val	Pro	Glu	Cys	Ala	Ile	Cys	Leu	Gln	Thr	Cys	Val	His	Pro	Val
		35				40						45			
Ser	Leu	Pro	Cys	Lys	His	Val	Phe	Cys	Tyr	Leu	Cys	Val	Lys	Gly	Ala
	50				55						60				
Ser	Trp	Leu	Gly	Lys	Arg	Cys	Ala	Leu	Cys	Arg	Gln	Glu	Ile	Pro	Glu
65				70						75				80	
Asp	Phe	Leu	Asp	Lys	Pro	Thr	Leu	Leu	Ser	Pro	Glu	Glu	Leu	Lys	Ala
			85						90					95	
Ala	Ser	Arg	Gly	Asn	Gly	Glu	Tyr	Ala	Trp	Tyr	Tyr	Glu	Gly	Arg	Asn
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Gly	Trp	Trp	Gln	Tyr	Asp	Glu	Arg	Thr	Ser	Arg	Glu	Leu	Glu	Asp	Ala
		115				120						125			
Phe	Ser	Lys	Gly	Lys	Lys	Asn	Thr	Glu	Met	Leu	Ile	Ala	Gly	Phe	Leu
	130					135					140				
Tyr	Val	Ala	Asp	Leu	Glu	Asn	Met	Val	Gln	Tyr	Arg	Arg	Asn	Glu	His
145				150						155				160	
Gly	Arg	Arg	Arg	Lys	Ile	Lys	Arg	Asp	Ile	Ile	Asp	Ile	Pro	Lys	Lys
			165					170					175		
Gly	Val	Ala	Gly	Leu	Arg	Leu	Asp	Cys	Asp	Ala	Asn	Thr	Val	Asn	Leu
		180						185					190		
Ala	Arg	Glu	Ser	Ser	Ala	Asp	Gly	Ala	Asp	Ser	Val	Ser	Ala	Gln	Ser
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Gly	Ala	Ser	Val	Gln	Pro	Leu	Val	Ser	Ser	Val	Arg	Pro	Leu	Thr	Ser

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Val Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser Pro Asp Ala Ser		
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Thr Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu Ser Gly Asp Asn		240
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Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu Asp His Glu Ser		255
	260	265
Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser Ile Glu Glu Thr		270
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Glu Ser Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser Ala Val Val Ala		285
	290	295
Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser Asn Ala Asn Gln		300
305	310	315
Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp Arg Ser Val Ala		320
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 <212> DNA  
 <213> Homo sapiens

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<210> 5312  
 <211> 190  
 <212> PRT  
 <213> Homo sapiens

<400> 5312  
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Ile Lys Ser Ser Asp Thr Arg Cys Cys Glu Leu Cys Lys Tyr Glu Phe
                35           40           45
Ile Met Glu Thr Lys Leu Lys Pro Leu Arg Lys Trp Glu Lys Leu Gln
                50           55           60
Met Thr Ser Ser Glu Arg Arg Lys Ile Met Cys Ser Val Thr Phe His
65                70           75           80
Val Ile Ala Ile Thr Cys Val Val Trp Ser Leu Tyr Val Leu Ile Asp
                85           90           95
Arg Pro Ala Glu Glu Ile Lys Gln Gly Gln Ala Thr Gly Ile Leu Glu
                100          105          110
Trp Pro Phe Trp Thr Lys Leu Val Val Val Ala Ile Gly Phe Thr Arg
                115          120          125
Gly Leu Leu Phe Met Tyr Val Gln Cys Lys Val Tyr Val Gln Leu Trp
                130          135          140
Lys Arg Leu Lys Ala Tyr Asn Arg Val Ile Tyr Val Gln Asn Cys Pro
145                150          155          160
Glu Thr Ser Lys Lys Asn Ile Phe Glu Lys Ser Pro Leu Thr Glu Pro
                165          170          175
Asn Phe Glu Asn Lys His Gly Tyr Gly Ile Cys His Ser Asp
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&lt;210&gt; 5313

&lt;211&gt; 322

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5313

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322

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&lt;210&gt; 5314

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5314

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<212> DNA
<213> Homo sapiens
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 2298

&lt;210&gt; 5316

&lt;211&gt; 544

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5316

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		20						25					30		
Glu	Phe	Thr	Asp	Leu	Gly	His	Arg	Leu	Asp	Cys	Leu	Asp	Leu	Lys	Gly
	35					40					45				
Glu	Lys	Leu	Asp	Tyr	Lys	Thr	Cys	Glu	Ala	Leu	Glu	Glu	Val	Phe	Lys

	50					55					60					
Arg 65	Leu	Gln	Phe	Lys	Val 70	Val	Asp	Leu	Glu	Gln 75	Thr	Asn	Leu	Asp	Glu 80	
Asp	Gly	Ala	Ser	Ala 85	Leu	Phe	Asp	Met	Ile	Glu 90	Tyr	Tyr	Glu	Ser	Ala 95	
Thr	His	Leu	Asn	Ile 100	Ser	Phe	Asn	Lys	His	Ile	Gly	Thr	Arg	Gly	Trp 110	
Gln	Ala	Ala	Ala	His 115	Met	Met	Arg	Lys	Thr	Ser	Cys	Leu	Gln	Tyr	Leu 125	
Asp	Ala 130	Arg	Asn	Thr	Pro	Leu	Leu	Asp	His	Ser	Ala	Pro	Phe	Val	Ala 140	
Arg 145	Ala	Leu	Arg	Ile	Arg	Ser	Ser	Leu	Ala	Val	Leu	His	Leu	Glu	Asn 160	
Ala	Ser	Leu	Ser	Gly 165	Arg	Pro	Leu	Met	Leu	Leu	Ala	Thr	Ala	Leu	Lys 175	
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Leu	Gly	Met	Thr	Leu	Ser	His	Thr	Gln	Ser	Leu	Glu	Thr	Leu	Asn	Leu 270	
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Gly	Leu	Met	Ala	Leu	Ser	Leu	Ala	Leu	Lys	Val	Asn	His	Ser	Leu	Leu 350	
Arg	Leu	Asp	Leu	Asp	Arg	Glu	Pro	Lys	Lys	Glu	Ala	Val	Lys	Ser	Phe 365	
Ile	Glu	Thr	Gln	Lys	Ala	Leu	Leu	Ala	Glu	Ile	Gln	Asn	Gly	Cys	Lys 380	
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Cys	Gly	Leu	Glu	His	Glu	Leu	Ser	Cys	Ser	Lys	Asn	Glu	Lys	Glu	Leu				
		515					520					525							
Glu	Glu	Leu	Leu	Leu	Glu	Ala	Ser	Gln	Glu	Ser	Gly	Gln	Glu	Thr	Leu				
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&lt;210&gt; 5317

&lt;211&gt; 889

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5317

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&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5318

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Pro	Thr	Ser	Pro	Thr	Ser	Ala	Ala	Ser	Arg	Ala	Cys	Gly	Ser	Arg	Gly
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Ala	Ala	Thr	Trp	Trp	Ser	Arg	Ser	Ser	Gly	Ser	Thr	Thr	Leu	Arg	Arg
	50					55					60				
Pro	Ser	Trp	Ala	Ser	Ser	Ser	Thr	Arg	Ala	Ser	Thr	Gly	Thr	Arg	Ser
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Pro	Ala	Ala	Ala	Ser	Arg	Arg	Pro	Cys	Gly	Ser	Pro	Ala	Arg	Gly	Arg
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Thr	Ser	Trp	Ser	Ala	Arg	Tyr	Thr	Ser	Pro	Arg	Met	Trp	Thr	Lys	Met
	100						105						110		
Thr	Cys	Arg	Arg	Cys	Arg	Thr	Ser	Ala	Trp	Trp	Trp	Ala	Trp	Ser	Ser
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	130														

&lt;210&gt; 5319

&lt;211&gt; 4231

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5319

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&lt;210&gt; 5322

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5322

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Phe	Ser	Asp	Ser	Val	Lys	Ser	Thr	Phe	Arg	His	Phe	Lys	Asp	Thr	Thr
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Lys	Asn	Ile	Phe	Asp	Glu	Lys	Gly	Asn	Lys	Arg	Phe	Gly	Ala	Thr	Lys
			165					170						175	
Glu	Ala	Ala	Glu	Lys	Pro	Arg	Thr	Val	Phe	Ser	Asp	Tyr	Leu	His	Pro

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 <211> 475  
 <212> DNA  
 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens



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&lt;210&gt; 5326

&lt;211&gt; 234

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5326

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 35 40 45  
 Gly Ser Ala Gly Cys Val Leu Ala Gly Arg Leu Thr Glu Asp Pro Ala  
 50 55 60  
 Glu Arg Val Leu Leu Leu Glu Ala Gly Pro Lys Asp Val Arg Ala Gly  
 65 70 75 80  
 Ser Lys Arg Leu Ser Trp Lys Ile His Met Pro Ala Ala Leu Val Ala  
 85 90 95  
 Asn Leu Cys Asp Asp Arg Tyr Asn Trp Cys Tyr His Thr Glu Val Gln

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Glu Asp Tyr Glu Arg Trp Gln Arg Gln Gly Ala Arg Gly Trp Asp Tyr					
145		150		155	160
Ala His Cys Leu Pro Tyr Phe Arg Lys Ala Gln Gly His Xaa Ala Gly					
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Arg Gln Pro Val Pro Gly Arg Asp Gly Pro Leu Arg Val Ser Arg Gly					
	180		185		190
Lys Thr Asn His Pro Leu His Cys Ala Phe Leu Glu Ala Thr Gln Gln					
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&lt;210&gt; 5327

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5327

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&lt;210&gt; 5328

&lt;211&gt; 694

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5328

Glu	His	Ser	Gly	Leu	Tyr	Val	Asn	Asn	Asn	Gly	Ile	Ile	Ser	Phe	Leu
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Lys	Glu	Val	Ser	Gln	Phe	Thr	Pro	Val	Ala	Phe	Pro	Ile	Ala	Lys	Asp
			20					25					30		
Arg	Cys	Val	Val	Ala	Ala	Phe	Trp	Ala	Asp	Val	Asp	Asn	Arg	Arg	Ala
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Gly	Asp	Val	Tyr	Tyr	Arg	Glu	Ala	Thr	Asp	Pro	Ala	Met	Leu	Arg	Arg

50	55	60
Ala Thr Glu Asp Val Arg His Tyr Phe Pro Glu Leu Leu Asp Phe Asn		
65	70	75
Ala Thr Trp Val Phe Val Ala Thr Trp Tyr Arg Val Thr Phe Phe Gly		80
	85	90
Gly Ser Ser Ser Ser Pro Val Asn Thr Phe Gln Thr Val Leu Ile Thr		95
	100	105
Asp Gly Lys Leu Ser Phe Thr Ile Phe Asn Tyr Glu Ser Ile Val Trp		110
	115	120
Thr Thr Gly Thr His Ala Ser Ser Gly Gly Asn Ala Thr Gly Leu Gly		125
	130	135
Gly Ile Ala Ala Gln Ala Gly Phe Asn Ala Gly Asp Gly Gln Arg Tyr		140
145	150	155
Phe Ser Ile Pro Gly Ser Arg Thr Ala Asp Met Ala Glu Val Glu Thr		160
	165	170
Thr Thr Asn Val Gly Val Pro Gly Arg Trp Ala Phe Arg Ile Asp Asp		175
	180	185
Ala Gln Val Arg Val Gly Gly Cys Gly His Thr Thr Ser Val Cys Leu		190
	195	200
Ala Leu Arg Pro Cys Leu Asn Gly Gly Lys Cys Ile Asp Asp Cys Val		205
	210	215
Thr Gly Asn Pro Ser Tyr Thr Cys Ser Cys Leu Ser Gly Phe Thr Gly		220
225	230	235
Arg Arg Cys His Leu Asp Val Asn Glu Cys Ala Ser Gln Pro Cys Gln		240
	245	250
Asn Gly Gly Thr Cys Thr His Gly Ile Asn Ser Phe Arg Cys Gln Cys		255
	260	265
Pro Ala Gly Phe Gly Gly Pro Thr Cys Glu Thr Ala Gln Ser Pro Cys		270
	275	280
Asp Thr Lys Glu Cys Gln His Gly Gly Gln Cys Gln Val Glu Asn Gly		285
	290	295
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305	310	315
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	325	330
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	340	345
Lys Gly Leu Arg Cys Glu Thr Gly Asp His Pro Val Pro His Ala Cys		350
	355	360
Leu Ser Ala Pro Cys His Asn Gly Gly Thr Cys Val Asp Ala Asp Gln		365
	370	375
Gly Tyr Val Cys Glu Cys Pro Glu Gly Phe Met Gly Leu Asp Cys Arg		380
385	390	395
Glu Arg Val Xaa Pro Met Thr Val Ser Ala Ala Thr Glu Ala Asp Ala		400
	405	410
Trp Ala Pro Thr Pro Pro Ser Ala His Ala Pro Cys Gly Xaa Ser Leu		415
	420	425
Gly Phe Ser Val Asn Leu Lys Ser Gln Pro Xaa Pro Cys Asn Met Asn		430
	435	440
Thr Gln Cys Pro Asp Gly Gly Tyr Cys Met Glu His Gly Gly Ser Tyr		445
	450	455
Leu Cys Val Cys His Thr Asp His Asn Ala Ser His Ser Leu Pro Ser		460
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Pro Cys Asp Ser Asp Pro Cys Phe Asn Gly Gly Ser Cys Asp Ala His		480

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<211> 2582
<212> DNA
<213> Homo sapiens
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<211> 308

<212> PRT

<213> Homo sapiens

<400> 5330

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Ala	Leu	Arg	Lys	Lys	Glu	Leu	Asp	Glu	Glu	Glu	Ser	Ile	Arg	Lys	Lys
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Ala	Val	Gln	Phe	Gly	Thr	Gly	Glu	Leu	Cys	Asp	Ala	Ile	Ser	Ala	Val
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Glu	Glu	Lys	Val	Ser	Tyr	Leu	Arg	Pro	Leu	Asp	Phe	Glu	Glu	Ala	Arg
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Glu	Leu	Phe	Leu	Leu	Gly	Gln	His	Tyr	Val	Phe	Glu	Ala	Lys	Glu	Phe
			85					90						95	
Phe	Gln	Ile	Asp	Gly	Tyr	Val	Thr	Asp	His	Ile	Glu	Val	Val	Gln	Asp
			100					105					110		
His	Ser	Ala	Leu	Phe	Lys	Val	Leu	Ala	Phe	Phe	Glu	Thr	Asp	Met	Glu
		115					120					125			
Arg	Arg	Cys	Lys	Met	His	Lys	Arg	Arg	Ile	Ala	Met	Leu	Glu	Pro	Leu
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Thr	Val	Asp	Leu	Asn	Pro	Gln	Tyr	Tyr	Leu	Leu	Val	Asn	Arg	Gln	Ile
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			165					170						175	
Ala	Ile	Ala	Asp	Arg	Leu	Arg	Asp	Pro	Asp	Ser	His	Ile	Val	Lys	Lys
		180						185				190			
Ile	Asn	Asn	Leu	Asn	Lys	Ser	Ala	Leu	Lys	Tyr	Tyr	Gln	Leu	Phe	Leu
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 <212> DNA  
 <213> Homo sapiens

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<210> 5332  
 <211> 61  
 <212> PRT



<213> Homo sapiens

<400> 5332

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			20					25					30		
Met	Ile	Thr	Asp	Ser	Gly	Lys	Phe	Ser	Gly	Ser	Ser	Pro	Ala	Pro	Pro
		35					40					45			
Ser	Gln	Pro	Gln	Gly	Leu	Ser	Tyr	Ala	Xaa	Gly	Arg	Gly			
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<210> 5333

<211> 883

<212> DNA

<213> Homo sapiens

<400> 5333

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<213> Homo sapiens

&lt;400&gt; 5334

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 Glu Ile Arg Gly Ser Arg Ala Arg Ala Leu Pro Asp Arg Ala Leu Val  
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 Asn Cys Gln Tyr Ser Ser Ala Thr Phe Ser Thr Gly Glu Arg Lys Arg  
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 Gln Thr Phe Glu Ala Ala Ile Leu Thr Gln Leu His Pro Arg Ser Gln  
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 225 230 235 240  
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&lt;210&gt; 5335

&lt;211&gt; 4282

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5335

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&lt;211&gt; 2742

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&lt;400&gt; 5337

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&lt;210&gt; 5342

&lt;211&gt; 690

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5342

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 Ile Leu His Leu Gly Leu Lys Ile Arg Gly Cys Leu Ser Arg Gln Pro

100					105					110					
Pro	Asp	Thr	Phe	Val	Asp	Ala	Phe	Glu	Arg	Arg	Ala	Arg	Ala	Gln	Pro
115					120					125					
Gly	Arg	Ala	Leu	Leu	Val	Trp	Thr	Gly	Pro	Gly	Ala	Gly	Ser	Val	Thr
130					135					140					
Phe	Gly	Glu	Leu	Asp	Ala	Arg	Ala	Cys	Gln	Ala	Ala	Trp	Ala	Leu	Lys
145	150					155					160				
Ala	Glu	Leu	Gly	Asp	Pro	Ala	Ser	Leu	Cys	Ala	Gly	Glu	Pro	Thr	Ala
165					170					175					
Leu	Leu	Val	Leu	Ala	Ser	Gln	Ala	Val	Pro	Ala	Leu	Cys	Met	Trp	Leu
180					185					190					
Gly	Leu	Ala	Lys	Leu	Gly	Cys	Pro	Thr	Ala	Trp	Ile	Asn	Pro	His	Gly
195					200					205					
Arg	Gly	Met	Pro	Leu	Ala	His	Ser	Val	Leu	Ser	Ser	Gly	Ala	Arg	Val
210	215					220					225				
Leu	Val	Val	Asp	Pro	Asp	Leu	Arg	Glu	Ser	Leu	Glu	Glu	Ile	Leu	Pro
225	230					235					240				
Lys	Leu	Gln	Ala	Glu	Asn	Ile	Arg	Cys	Phe	Tyr	Leu	Ser	His	Thr	Ser
245					250					255					
Pro	Thr	Pro	Gly	Val	Gly	Ala	Leu	Gly	Ala	Ala	Leu	Asp	Ala	Ala	Pro
260					265					270					
Ser	His	Pro	Val	Pro	Ala	Asp	Leu	Arg	Ala	Gly	Ile	Thr	Trp	Arg	Ser
275					280					285					
Pro	Ala	Leu	Phe	Ile	Tyr	Thr	Ser	Gly	Thr	Thr	Gly	Leu	Pro	Lys	Pro
290	295					300					305				
Ala	Ile	Leu	Thr	His	Glu	Arg	Val	Leu	Gln	Met	Ser	Lys	Met	Leu	Ser
305	310					315					320				
Leu	Ser	Gly	Ala	Thr	Ala	Asp	Asp	Val	Val	Tyr	Thr	Val	Leu	Pro	Leu
325					330					335					
Tyr	His	Val	Met	Gly	Leu	Val	Val	Gly	Ile	Leu	Gly	Cys	Leu	Asp	Leu
340					345					350					
Gly	Ala	Thr	Cys	Val	Leu	Ala	Pro	Lys	Phe	Ser	Thr	Ser	Cys	Phe	Trp
355					360					365					
Asp	Asp	Cys	Arg	Gln	His	Gly	Val	Thr	Val	Ile	Leu	Tyr	Val	Gly	Glu
370	375					380					385				
Leu	Leu	Arg	Tyr	Leu	Cys	Asn	Ile	Pro	Gln	Gln	Pro	Glu	Asp	Arg	Thr
385	390					395					400				
His	Thr	Val	Arg	Leu	Ala	Met	Gly	Asn	Gly	Leu	Arg	Ala	Asp	Val	Trp
405					410					415					
Glu	Thr	Phe	Gln	Gln	Arg	Phe	Gly	Pro	Ile	Arg	Ile	Trp	Glu	Val	Tyr
420					425					430					
Gly	Ser	Thr	Glu	Gly	Asn	Met	Gly	Leu	Val	Asn	Tyr	Val	Gly	Arg	Cys
435					440					445					
Gly	Ala	Leu	Gly	Lys	Met	Ser	Cys	Leu	Leu	Arg	Met	Leu	Ser	Pro	Phe
450	455					460					465				
Glu	Leu	Val	Gln	Phe	Asp	Met	Glu	Ala	Ala	Glu	Pro	Val	Arg	Asp	Asn
465	470					475					480				
Gln	Gly	Phe	Cys	Ile	Pro	Val	Gly	Leu	Gly	Glu	Pro	Gly	Leu	Leu	Leu
485					490					495					
Thr	Lys	Val	Val	Ser	Gln	Gln	Pro	Phe	Val	Gly	Tyr	Arg	Gly	Pro	Arg
500					505					510					
Glu	Leu	Ser	Glu	Arg	Lys	Leu	Val	Arg	Asn	Val	Arg	Gln	Ser	Gly	Asp
515					520					525					
Val	Tyr	Tyr	Asn	Thr	Gly	Asp	Val	Leu	Ala	Met	Asp	Arg	Glu	Gly	Phe

530	535	540
Leu Tyr Phe Arg Asp Arg Leu Gly Asp Thr Phe Arg Trp Lys Gly Glu		
545	550	555
Asn Val Ser Thr His Glu Val Glu Gly Val Leu Ser Gln Val Asp Phe		560
	565	570
Leu Gln Gln Val Asn Val Tyr Gly Val Cys Val Pro Gly Cys Glu Gly		575
	580	585
Lys Val Gly Met Ala Ala Val Gln Leu Ala Pro Gly Gln Thr Phe Asp		590
	595	600
Gly Glu Lys Leu Tyr Gln His Val Arg Ala Trp Leu Pro Ala Tyr Ala		605
	610	615
Thr Pro His Phe Ile Arg Ile Gln Asp Ala Met Glu Val Thr Ser Thr		620
625	630	635
Phe Lys Leu Met Lys Thr Arg Leu Val Arg Glu Gly Phe Asn Val Gly		640
	645	650
Ile Val Val Asp Pro Leu Phe Val Leu Asp Asn Arg Ala Gln Ser Phe		655
	660	665
Arg Pro Leu Thr Ala Glu Met Tyr Gln Ala Val Cys Glu Gly Thr Trp		670
	675	680
Lys Leu		685
690		

&lt;210&gt; 5343

&lt;211&gt; 752

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5343

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120  
cggcgggcag attttgtggc tggctctctg agtggacggg tcatagtggc tgggggactt  
180  
gggaatcaac ccactgtcct ggagacggcg gaagcattcc acccagggaa gaacaaatgg  
240  
gagatcctcc ctgccatgcc cacaccccg cgtgctctgct ccagcatagt cgtcaagaac  
300  
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480  
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540  
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600  
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660  
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752

<210> 5344  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

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 Glu Arg Ser Phe Phe Leu Lys Lys Arg Arg Ala Asp Phe Val Ala Gly  
 35 40 45  
 Ser Leu Ser Gly Arg Val Ile Val Ala Gly Gly Leu Gly Asn Gln Pro  
 50 55 60  
 Thr Val Leu Glu Thr Ala Glu Ala Phe His Pro Gly Lys Asn Lys Trp  
 65 70 75 80  
 Glu Ile Leu Pro Ala Met Pro Thr Pro Arg Cys Ala Cys Ser Ser Ile  
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<210> 5345  
 <211> 1912  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 240  
 aggtcatggg ccagcaaaag ggtctctgaa tctgtgaagg ccttgctgtt aaagggcaaa  
 300  
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 360  
 aatgatgtct atgatgtcat gctaaatcag accaatctcc agttcaacaa caacaagtac  
 420  
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 480  
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 540  
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 600  
 gaaaagtgtg agaaggtgcc tggaaaatat gatatgctac agatggacta tgccaccaat  
 660  
 actcaggatg aagaggaaac aaagaaagag gaatctctta aatctccctt gaagccagag  
 720

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 780  
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 840  
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 900  
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 1020  
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 1080  
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 1200  
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 1260  
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 1320  
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 1380  
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 1440  
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 1560  
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 1680  
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 1740  
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 1800  
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 1860  
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 1912

&lt;210&gt; 5346

&lt;211&gt; 534

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5346

Met	Pro	Val	Ala	Gly	Gly	Lys	Ala	Asn	Lys	Asp	Arg	Thr	Glu	Asp	Lys
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Gln	Asp	Gly	Met	Pro	Gly	Arg	Ser	Trp	Ala	Ser	Lys	Arg	Val	Ser	Glu
			20					25					30		
Ser	Val	Lys	Ala	Leu	Leu	Leu	Lys	Gly	Lys	Ala	Pro	Val	Asp	Pro	Glu
			35				40					45			
Cys	Thr	Ala	Lys	Val	Gly	Lys	Ala	His	Val	Tyr	Cys	Glu	Gly	Asn	Asp



4521

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<210> 5347<211> 2893
<212> DNA
<213> Homo sapiens
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4522

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1320  
ccatttctgc agttaaattc tcataccacc aatcctgagc aaacccttcc tggaactaat  
1380  
ttgacaggat ttctttcacc ggttgacaat catatgagga atctaacaag ccaagaccta  
1440  
ctgtatgacc ttgacataaa tatatttgat gagataaaact taatgtcatt ggccacagaa  
1500  
gacaactttg atccaatcga tgtttctcag ctttttgatg aatcagattc tgattctggc  
1560  
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1620  
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1680  
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1740  
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1800  
cacttacagc caactgcacc agaatctact tctgaacctt ttccgtggcc tgggaagtca  
1860  
cagaagataa ggagtagata ccttgaagac acagatagaa acttgagccg tgatgaacag  
1920  
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1980  
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2040  
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2100  
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2160  
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2220  
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2280  
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2520  
tttgaagctt acatggacaa atgttttagga cttcaagatc acacttggtg gcaatctggg  
2580  
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2640  
aggttaacat gaaaaccag taagactttc catcttggca gccatccttt ttaagagtaa  
2700  
gttggttact tcaaaaagag caaacactgg ggatcaaatt attttaagag gtatttcagt  
2760  
tttaaatgca aaatagcctt attttcattt agtttgtag cactatagtg agcttttcaa  
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2880

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2893

<210> 5348

<211> 694

<212> PRT

<213> Homo sapiens

<400> 5348

Met	Lys	His	Leu	Lys	Arg	Trp	Trp	Ser	Ala	Gly	Gly	Gly	Leu	Leu	His
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Leu	Thr	Leu	Leu	Leu	Ser	Leu	Ala	Gly	Leu	Arg	Val	Asp	Leu	Asp	Leu
			20					25					30		
Tyr	Leu	Leu	Leu	Pro	Pro	Pro	Thr	Leu	Leu	Gln	Asp	Glu	Leu	Leu	Phe
			35				40					45			
Leu	Gly	Gly	Pro	Ala	Ser	Ser	Ala	Tyr	Ala	Leu	Ser	Pro	Phe	Ser	Ala
	50					55					60				
Ser	Gly	Gly	Trp	Gly	Arg	Ala	Gly	His	Leu	His	Pro	Lys	Gly	Arg	Glu
65					70					75					80
Leu	Asp	Pro	Ala	Ala	Pro	Pro	Glu	Gly	Gln	Leu	Leu	Arg	Glu	Val	Arg
				85					90					95	
Ala	Leu	Gly	Val	Pro	Phe	Val	Pro	Arg	Thr	Ser	Val	Asp	Ala	Trp	Leu
			100					105					110		
Val	His	Ser	Val	Ala	Ala	Gly	Ser	Ala	Asp	Glu	Ala	His	Gly	Leu	Leu
			115				120					125			
Gly	Ala	Ala	Ala	Ala	Ser	Ser	Thr	Gly	Gly	Ala	Gly	Ala	Ser	Val	Asp
	130					135					140				
Gly	Gly	Ser	Gln	Ala	Val	Gln	Gly	Gly	Cys	Gly	Asp	Ser	Arg	Ala	Ala
145					150					155				160	
Arg	Ser	Gly	Pro	Leu	Asp	Ala	Gly	Glu	Glu	Lys	Ala	Pro	Ala	Glu	
			165						170				175		
Pro	Thr	Ala	Gln	Val	Pro	Asp	Ala	Gly	Gly	Cys	Ala	Ser	Glu	Glu	Asn
			180					185					190		
Gly	Val	Leu	Arg	Glu	Lys	His	Glu	Ala	Val	Asp	His	Ser	Ser	Gln	His
			195				200						205		
Glu	Glu	Asn	Glu	Glu	Arg	Val	Ser	Ala	Gln	Lys	Glu	Asn	Ser	Leu	Gln
	210					215					220				
Gln	Asn	Asp	Asp	Asp	Glu	Asn	Lys	Ile	Ala	Glu	Lys	Pro	Asp	Trp	Glu
225					230					235				240	
Ala	Glu	Lys	Thr	Thr	Glu	Ser	Arg	Asn	Glu	Arg	His	Leu	Asn	Gly	Thr
			245						250					255	
Asp	Thr	Ser	Phe	Ser	Leu	Glu	Asp	Leu	Phe	Gln	Leu	Leu	Ser	Ser	Gln
			260					265					270		
Pro	Glu	Asn	Ser	Leu	Glu	Gly	Ile	Ser	Leu	Gly	Asp	Ile	Pro	Leu	Pro
	275						280					285			
Gly	Ser	Ile	Ser	Asp	Gly	Met	Asn	Ser	Ser	Ala	His	Tyr	His	Val	Asn
	290				295						300				
Phe	Ser	Gln	Ala	Ile	Ser	Gln	Asp	Val	Asn	Leu	His	Glu	Ala	Ile	Leu
305					310					315				320	
Leu	Cys	Pro	Asn	Asn	Thr	Phe	Arg	Arg	Asp	Pro	Thr	Ala	Arg	Thr	Ser
			325						330					335	
Gln	Ser	Gln	Glu	Pro	Phe	Leu	Gln	Leu	Asn	Ser	His	Thr	Thr	Asn	Pro

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Glu Gln Thr Leu Pro Gly Thr Asn Leu Thr Gly Phe Leu Ser Pro Val
          355          360          365
Asp Asn His Met Arg Asn Leu Thr Ser Gln Asp Leu Leu Tyr Asp Leu
          370          375          380
Asp Ile Asn Ile Phe Asp Glu Ile Asn Leu Met Ser Leu Ala Thr Glu
          385          390          395          400
Asp Asn Phe Asp Pro Ile Asp Val Ser Gln Leu Phe Asp Glu Ser Asp
          405          410          415
Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
          420          425          430
Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
          435          440          445
Tyr Cys Thr Asp His Glu Ser Ser Ser His His Asp Leu Glu Gly Ala
          450          455          460
Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
          465          470          475          480
Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
          485          490          495
Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
          500          505          510
Pro Phe Pro Trp Pro Gly Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu
          515          520          525
Glu Asp Thr Asp Arg Asn Leu Ser Arg Asp Glu Gln Arg Ala Lys Ala
          530          535          540
Leu His Ile Pro Phe Ser Val Asp Glu Ile Val Gly Met Pro Val Asp
          545          550          555          560
Ser Phe Asn Ser Met Leu Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val
          565          570          575
Asp Ile Arg Arg Arg Gly Lys Asn Lys Val Ala Ala
          580          585          590
Gln Asn Cys Arg Lys Arg Lys Leu Asp Ile Ile Leu Asn Leu Glu Asp
          595          600          605
Asp Val Cys Asn Leu Gln Ala Lys Lys Glu Thr Leu Lys Arg Glu Gln
          610          615          620
Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp
          625          630          635          640
Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro
          645          650          655
Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
          660          665          670
Leu Ile Val Pro Lys Glu Leu Val Ala Ser Gly His Lys Lys Glu Thr
          675          680          685
Gln Lys Gly Lys Arg Lys
          690

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&lt;210&gt; 5349

&lt;211&gt; 425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5349

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 gccaggaagg ggaaggcagg ataccactgc ctgggaaggc ggaagtgaga gaggcaggcc  
 240  
 aacccattcc tgtttctctt ctacttcttt ctccaaagaa agccctcact ctctctgcta  
 300  
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 <212> PRT  
 <213> Homo sapiens

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 Leu Gly Lys His His Thr Ser Arg Glu Pro Gln Ala Gln Pro Lys Pro  
 35 40 45  
 His Lys Val Ser Ser Gln Glu Gly Glu Gly Arg Ile Pro Leu Pro Gly  
 50 55 60  
 Lys Ala Glu Val Arg Glu Ala Gly Gln Pro Ile Pro Val Ser Leu Leu  
 65 70 75 80  
 Leu Leu Ser Pro Lys Lys Ala Leu Thr Leu Leu Ala Thr Ala Gln Gly  
 85 90 95  
 Gly His Glu Gly Leu Gly Arg Leu Leu Trp Gln Ser Gly Pro Leu Gln  
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 Ser Ser Ala Phe Thr Arg  
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 <213> Homo sapiens

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 Asn Cys Asp Thr Arg Asn Gly Ser Asn Lys Ser Asp Phe Asp Trp His  
 35 40 45  
 Gln Asp Ala Leu Ser Lys Ser Leu Gln Gln Asn Leu Pro Ser Arg Ser  
 50 55 60  
 Val Ser Lys Pro Ser Leu Phe Ser Ser Val Gln Leu Tyr Arg Gln Ser  
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 Ser Lys Met Cys Gly Thr Val Phe Thr Gly Ala Ser Arg Phe Arg Cys  
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 <213> Homo sapiens

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 <211> 605  
 <212> PRT  
 <213> Homo sapiens

<400> 5354  
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 Gly Asp Arg Val Ala Ile Tyr Met Pro Met Ile Pro Glu Leu Val Val  
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 Ala Gly Phe Ser Ser Glu Ser Leu Cys Glu Arg Ile Leu Asp Ser Ser  
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 Cys Ser Leu Leu Ile Thr Thr Asp Ala Phe Tyr Arg Gly Glu Lys Leu  
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 Val Asn Leu Lys Glu Leu Ala Asp Glu Ala Leu Gln Lys Cys Gln Glu  
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 Lys Gly Phe Pro Val Arg Cys Cys Ile Val Val Lys His Leu Gly Arg  
 145 150 155 160  
 Ala Glu Leu Gly Met Gly Thr Pro Pro Ala Ser Pro Pro Gln Leu Arg  
 165 170 175  
 Gly His Ala Asp Val Gln Ile Ser Trp Asn Gln Gly Ile Asp Leu Trp  
 180 185 190  
 Trp His Glu Leu Met Gln Glu Ala Gly Asp Glu Cys Glu Pro Glu Trp  
 195 200 205  
 Cys Asp Ala Glu Asp Pro Leu Phe Ile Leu Tyr Thr Ser Gly Ser Thr  
 210 215 220  
 Gly Lys Pro Lys Gly Val Val His Thr Val Gly Gly Tyr Met Leu Tyr  
 225 230 235 240  
 Val Ala Thr Thr Phe Lys Tyr Val Phe Asp Phe His Ala Glu Asp Val  
 245 250 255  
 Phe Trp Cys Thr Ala Asp Ile Gly Trp Ile Thr Gly His Ser Tyr Val  
 260 265 270  
 Thr Tyr Gly Pro Leu Ala Asn Gly Ala Thr Ser Val Leu Phe Glu Gly

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Met	Lys Phe Gly Asp Glu Pro Val Thr Lys His Ser Arg Ala Ser Leu					
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Gln	Val Leu Gly Thr Val Gly Glu Pro Ile Asn Pro Glu Ala Trp Leu					
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Trp	Tyr His Arg Val Val Gly Ala Gln Arg Cys Pro Ile Val Asp Thr					
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Phe	Trp Gln Thr Glu Thr Gly Gly His Met Leu Thr Pro Leu Pro Val					
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Pro	Thr Pro Met Lys Pro Gly Ser Ala Thr Phe Pro Phe Phe Gly Val					
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Ala	Pro Ala Ile Leu Asn Glu Ser Gly Glu Glu Leu Glu Gly Glu Ala					
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Glu	Gly Tyr Leu Val Phe Lys Gln Pro Trp Pro Gly Ile Met Arg Thr					
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Val	Tyr Gly Asn His Glu Arg Phe Glu Thr Thr Tyr Ser Lys Lys Phe					
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Pro	Gly Tyr Tyr Val Thr Gly Asp Gly Cys Gln Arg Asp Gln Asp Gly					
		450	455			460
Tyr	Tyr Trp Ile Thr Gly Arg Ile Asp Asp Met Leu Asn Val Ser Gly					
465		470	475			480
His	Leu Leu Ser Thr Ala Glu Val Glu Ser Ala Leu Val Glu His Glu					
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Ala	Val Ala Glu Ala Ala Val Val Gly His Pro His Pro Val Lys Gly					
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Glu	Cys Leu Tyr Cys Phe Val Thr Leu Cys Asp Gly His Thr Phe Ser					
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Pro	Lys Leu Thr Glu Glu Leu Lys Lys Gln Ile Arg Glu Lys Ile Gly					
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Pro	Ile Ala Thr Pro Asp Tyr Ile Gln Asn Ala Pro Gly Leu Pro Lys					
545		550	555			560
Thr	Arg Ser Gly Lys Ile Met Arg Arg Val Leu Arg Lys Ile Ala Gln					
		565	570			575
Asn	Asp His Asp Leu Gly Asp Met Ser Thr Val Ala Asp Pro Ser Val					
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Ile	Ser His Leu Phe Ser His Arg Cys Leu Thr Ile Gln					
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&lt;210&gt; 5355

&lt;211&gt; 1596

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5355

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&lt;210&gt; 5356

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5356

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Cys Arg Phe His Ser Phe Lys Lys Val Leu Tyr Glu Met Gly Pro Glu
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Tyr Ser Ser Asn Val Glu Leu Ala Ser Phe His Ser Thr Ser Lys Gly
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Tyr Met Gly Glu Cys Gly Tyr Arg Gly Gly Tyr Met Glu Val Val Asn
 65           70           75           80
Leu His Pro Glu Ile Lys Gly Gln Leu Val Lys Leu Leu Ser Val Arg
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Glu Ser Val Leu Gly Asn Leu Ala Lys Lys Ala Lys Leu Thr Glu Asp
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&lt;210&gt; 5357

&lt;211&gt; 1722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5357

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&lt;210&gt; 5358

&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5358

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<212> DNA
<213> Homo sapiens
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 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<211> 894

<212> DNA

<213> Homo sapiens

<400> 5363

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&lt;210&gt; 5364

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5364

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Pro	Gly	Leu	Tyr	Ser	Tyr	Ile	Arg	Asp	Asp	Leu	Phe	Thr	Ser	Glu	Ile
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Val	Arg	Arg	Phe	Leu	Gly	Arg	Phe	Gly	Leu	Gln	Pro	His	Lys	Thr	Lys
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Leu	Phe	Gly	Gln	Pro	Pro	Cys	Ala	Phe	Val	Thr	Phe	Arg	Ser	Ala	Ala
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Glu	Arg	Asp	Lys	Ala	Leu	Arg	Val	Leu	His	Gly	Ala	Leu	Trp	Lys	Gly
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Arg	Pro	Leu	Ser	Val	Ala	Trp	Pro	Gly	Pro	Arg	Pro	Thr	Pro	Trp	Pro
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Gly	Arg	Arg	Gly	Asp	Pro	Ser	Met	Asp	Ser	Ala	Leu	Xaa	Leu	Ser	Ser
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Leu	Ser	Gly	Ser	Ser	Trp	Ser	Ala	Ser	Arg	Cys	Cys	Arg	Asn	Xaa	Ala
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&lt;210&gt; 5365

&lt;211&gt; 1824



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5365

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<210> 5366

<211> 477

<212> PRT

<213> Homo sapiens

<400> 5366

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					70					75					80
Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
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Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
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Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
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Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
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Gly	Asn	Leu	Gln	Ala	Arg	Glu	Glu	Gln	Ser	Leu	Ala	Glu	Trp	Gln	Gly
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Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
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Ser Ser Pro Glu Gly Ser Gly Phe Cys Ser Lys Asp Arg Phe Val Ala		
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Tyr Pro Cys Ala Val Gly Gln Thr Ala Phe Ser Ser Gly Arg His Tyr		
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Trp Glu Val Gly Met Asn Ile Thr Gly Asp Ala Leu Trp Ala Leu Gly		
	355	360
Val Cys Arg Asp Asn Val Ser Arg Lys Asp Arg Val Leu Lys Cys Pro		
	370	375
Glu Asn Gly Phe Trp Val Val Gln Leu Ser Lys Gly Thr Lys Tyr Leu		
385	390	395
Ser Thr Phe Ser Ala Leu Thr Pro Val Met Leu Met Glu Pro Pro Ser		
	405	410
His Met Gly Ile Phe Leu Asp Phe Glu Ala Gly Glu Val Ser Phe Tyr		
	420	425
Ser Val Ser Asp Gly Ser His Leu His Thr Tyr Ser Gln Ala Thr Phe		
	435	440
Pro Gly Pro Leu Gln Pro Phe Phe Cys Leu Gly Ala Pro Lys Ser Gly		
	450	455
Gln Met Val Ile Ser Thr Val Thr Met Trp Val Lys Gly		
465	470	475

&lt;210&gt; 5367

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5367

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&lt;210&gt; 5368

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 35 40 45  
 Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr  
 50 55 60  
 Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile  
 65 70 75 80  
 Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu  
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 Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu  
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 <212> DNA  
 <213> Homo sapiens

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<211> 148  
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<400> 5370

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      20           25           30
Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys
      35           40           45
Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro
      50           55           60
Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala
65           70           75           80
His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro
      85           90           95
Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg
      100          105          110
Ser Glu Arg Ala Pro Ser Pro Pro Pro Pro Pro Leu Pro Pro Ser Pro
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Pro Phe Leu Phe
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<212> PRT

<213> Homo sapiens

<400> 5372

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			20					25				30			
Val	Val	Gly	Phe	Gly	Gly	Ile	His	Ser	Thr	Pro	Ser	Thr	Val	Leu	Ser
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Asp	Gln	Ala	Lys	Tyr	Leu	Asn	Pro	Leu	Leu	Gly	Glu	Trp	Lys	His	Phe
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Thr	Ala	Ser	Leu	Ala	Pro	Arg	Met	Ser	Asn	Gln	Gly	Ile	Ala	Val	Leu
65					70					75				80	
Asn	Asn	Phe	Val	Tyr	Leu	Ile	Gly	Gly	Asp	Asn	Asn	Val	Gln	Gly	Phe
			85					90					95		
Arg	Ala	Glu	Ser	Arg	Cys	Trp	Arg	Tyr	Asp	Pro	Arg	His	Asn	Arg	Trp
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Xaa	Pro	Asp	Pro	Val	Pro	Ala	Ala	Gly	Ala	Arg	Arg	Pro	Val	Xaa	Val
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Cys	Val	Val	Gly	Arg	Tyr	Ile	Tyr	Ala	Val	Ala	Gly	Arg	Asp	Tyr	His
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Ala	Tyr	Val	Ala	Pro	Leu	Lys	Arg	Glu	Val	Tyr	Ala	His	Ala	Gly	Ala
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Thr	Leu	Glu	Gly	Lys	Met	Tyr	Ile	Thr	Cys	Gly	Arg	Arg	Gly	Glu	Asp
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Ala	Ala	Cys	Val	Leu	Thr	Leu	Pro	Arg	Ser	Leu	Leu	Leu	Glu	Pro	Pro
				325					330					335	
Arg	Gly	Thr	Pro	Asp	Arg	Ser	Gln	Ala	Asp	Pro	Asp	Phe	Ala	Ser	Glu
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Val	Met	Ser	Val	Ser	Asp	Trp	Glu	Glu	Phe	Asp	Asn	Ser	Ser	Glu	Asp
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&lt;210&gt; 5373

&lt;211&gt; 4221

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5373

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<210> 5374  
 <211> 886  
 <212> PRT  
 <213> Homo sapiens

<400> 5374

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		20						25					30		
Lys	Lys	Ser	Leu	Gln	Glu	Lys	Gly	Lys	Leu	Ser	Ala	Glu	Glu	Asn	Pro
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Asp	Asp	Ser	Glu	Val	Pro	Ser	Ser	Ser	Gly	Ile	Asn	Ser	Thr	Lys	Ser
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Gln	Asp	Lys	Asp	Val	Asn	Glu	Gly	Glu	Thr	Ser	Asp	Gly	Val	Arg	Lys
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Ser	Val	His	Lys	Val	Phe	Ala	Ser	Met	Leu	Gly	Glu	Asn	Glu	Asp	Asp
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		100					105						110		
Pro	Glu	Gln	Pro	Thr	Ala	Gly	Asp	Val	Phe	Val	Leu	Glu	Met	Val	Leu
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Asn	Arg	Glu	Thr	Lys	Lys	Met	Met	Lys	Glu	Lys	Arg	Pro	Arg	Ser	Lys
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Ala	Arg	Gly	Glu	Arg	Glu	Glu	Ala	Ile	Leu	Met	Cys	Met	Glu	Ile	Ile
			165					170					175		
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		180					185						190		
Tyr	Glu	Asp	Gln	Gly	Asp	Met	Glu	Lys	Ser	Leu	Gln	Phe	Glu	Leu	Ile
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Ala	Ala	His	Leu	Asn	Pro	Ser	Asp	Thr	Glu	Glu	Trp	Val	Arg	Leu	Ala
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225					230					235				240	
Thr	Lys	Ala	Leu	Lys	Tyr	Glu	Pro	Thr	Asn	Val	Arg	Tyr	Leu	Trp	Glu
			245						250					255	
Arg	Ser	Ser	Leu	Tyr	Glu	Gln	Met	Gly	Asp	His	Lys	Met	Ala	Met	Asp
		260						265					270		
Gly	Tyr	Arg	Arg	Ile	Leu	Asn	Leu	Leu	Ser	Pro	Ser	Asp	Gly	Glu	Arg
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Phe	Met	Gln	Leu	Ala	Arg	Asp	Met	Ala	Lys	Ser	Tyr	Tyr	Glu	Ala	Asn
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Asp	Val	Thr	Ser	Ala	Ile	Asn	Ile	Ile	Asp	Glu	Ala	Phe	Ser	Lys	His
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Gln	Gly	Leu	Val	Ser	Met	Glu	Asp	Val	Asn	Ile	Ala	Ala	Glu	Leu	Tyr
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Ile	Ser	Asn	Lys	Gln	Tyr	Asp	Lys	Ala	Leu	Glu	Ile	Ile	Thr	Asp	Phe

[illegible]

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Tyr Val Leu Arg Arg His Ala Leu Ile Val Gln Gly Phe Ser Phe Leu
785              790              795              800
Asn Arg Tyr Leu Ser Leu Arg Gly Pro Cys Gln Glu Ser Phe Tyr Asn
      805              810              815
Leu Gly Arg Gly Leu His Gln Leu Gly Leu Ile His Leu Ala Ile His
      820              825              830
Tyr Tyr Gln Lys Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile
      835              840              845
Glu Leu Asp Gln Leu Asp Leu Arg Arg Asp Ile Ala Tyr Asn Leu Ser
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<210> 5375  
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 <212> DNA  
 <213> Homo sapiens

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120
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240
cccctctcc ttattaaaga agaatacatg tcgctgccat ttgccacgta ttgccatag
300
accaggact attagcatct ttaaccacag taaccacact ggggatggct ggggaatggt
360
catgtcccca ttttacagga gtggtgatta aggctcaaag gatggaggtg atggatcaaa
420
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526

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<210> 5376  
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 <212> PRT  
 <213> Homo sapiens

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Leu Gln Arg Ala Ala Ala Ser Ser Glu Ser Pro Val Ala Arg Thr Trp
35      40      45
Val Gln Leu Lys Ser Ile Ser Leu Phe Ala Phe Ser Glu Ala Ser Pro

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50		55		60
Ser Ser Leu Leu Lys Lys Asn Thr Cys Arg Cys His Leu Pro Arg Ile				
65		70		75
Cys His Arg Pro Arg Thr Ile Ser Ile Phe Asn Pro Arg Asn His Thr				
	85		90	95
Gly Asp Gly Trp Gly Met Phe Met Ser Pro Phe Tyr Arg Ser Gly Asp				
	100		105	110

&lt;210&gt; 5377

&lt;211&gt; 1452

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5377

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120
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1200

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<212> PRT

<213> Homo sapiens

<400> 5378

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			20					25					30		
Arg	Ser	Gly	Leu	Arg	Leu	Gly	Ser	Arg	Gly	Leu	Cys	Thr	Arg	Leu	Ala
		35					40					45			
Thr	Pro	Pro	Arg	Arg	Ala	Pro	Asp	Gln	Ala	Ala	Glu	Ile	Gly	Ser	Arg
	50					55					60				
Gly	Ser	Thr	Lys	Ala	Gln	Gly	Pro	Gln	Gln	Gln	Pro	Gly	Ser	Glu	Gly
65					70					75					80
Pro	Ser	Tyr	Ala	Lys	Lys	Val	Ala	Leu	Trp	Leu	Ala	Gly	Leu	Leu	Gly
				85					90					95	
Ala	Gly	Gly	Thr	Val	Ser	Val	Val	Tyr	Ile	Phe	Gly	Asn	Asn	Pro	Val
			100					105					110		
Asp	Glu	Asn	Gly	Ala	Lys	Ile	Pro	Asp	Glu	Phe	Asp	Asn	Asp	Pro	Ile
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Leu	Val	Gln	Gln	Leu	Arg	Arg	Thr	Tyr	Lys	Tyr	Phe	Lys	Asp	Tyr	Arg
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Gln	Met	Ile	Ile	Glu	Pro	Thr	Ser	Pro	Cys	Leu	Leu	Pro	Asp	Pro	Leu
145					150					155					160
Gln	Glu	Pro	Tyr	Tyr	Gln	Pro	Pro	Tyr	Thr	Leu	Val	Leu	Glu	Leu	Thr
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			180					185					190		
Lys	Lys	Arg	Pro	Gly	Ile	Glu	Thr	Leu	Phe	Gln	Gln	Leu	Ala	Pro	Leu
		195					200					205			
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225					230					235					240
Arg	Asp	Ala	Thr	Arg	Tyr	Met	Asp	Gly	His	His	Val	Lys	Asp	Ile	Ser
			245						250					255	
Cys	Leu	Asn	Arg	Asp	Pro	Ala	Arg	Val	Val	Val	Val	Asp	Cys	Lys	Lys
		260						265					270		
Glu	Ala	Phe	Arg	Leu	Gln	Pro	Tyr	Asn	Gly	Val	Ala	Leu	Arg	Pro	Trp
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Asp	Gly	Asn	Ser	Asp	Asp	Arg	Val	Leu	Leu	Asp	Leu	Ser	Ala	Phe	Leu

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Lys Thr Ile Ala Leu Asn Gly Val Glu Asp Val Arg Thr Val Leu Glu				
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His Tyr Ala Leu Glu Asp Asp Pro Leu Ala Ala Phe Lys Gln Arg Gln				
	325		330	335
Ser Arg Leu Glu Gln Glu Glu Gln Gln Arg Leu Ala Glu Leu Ser Lys				
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Ser Asn Lys Gln Asn Leu Phe Leu Gly Ser Leu Thr Ser Arg Leu Trp				
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Pro Arg Ser Lys Gln Pro				
370				

&lt;210&gt; 5379

&lt;211&gt; 3213

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5379

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&lt;210&gt; 5380

&lt;211&gt; 903

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5380

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Gln	Leu	Cys	His	Gly	Leu	Val	Gly	Ser	Trp	Pro	Ala	Cys	Ser	Ala	Pro
			20					25						30	
Ser	Cys	Ala	Pro	Ala	Leu	Leu	Gly	Ser	Gly	Cys	Gly	Ser	Gly	Glu	Ser
		35					40						45		
Cys	Asp	Arg	Gly	Cys	Leu	Ala	Ala	Ile	Leu	Ala	Ser	Thr	Ser	Ala	Thr
	50					55					60				
Gln	Ala	Arg	Met	Val	Leu	Arg	Cys	Cys	Ser	Glu	Phe	Ile	Glu	Ala	His
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Gly	Val	Val	Asp	Gly	Ile	Tyr	Arg	Leu	Ser	Gly	Val	Ser	Ser	Asn	Ile
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Gln	Arg	Leu	Arg	His	Glu	Phe	Asp	Ser	Glu	Arg	Ile	Pro	Glu	Leu	Ser
			100					105						110	
Gly	Pro	Ala	Phe	Leu	Gln	Asp	Ile	His	Ser	Val	Ser	Ser	Leu	Cys	Lys
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Leu	Tyr	Phe	Arg	Glu	Leu	Pro	Asn	Pro	Leu	Leu	Thr	Tyr	Gln	Leu	Tyr
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Gly	Lys	Phe	Ser	Glu	Ala	Met	Ser	Val	Pro	Gly	Glu	Glu	Glu	Arg	Leu
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Val	Arg	Val	His	Asp	Val	Ile	Gln	Gln	Leu	Pro	Pro	Pro	His	Tyr	Arg
			165						170					175	
Thr	Leu	Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser
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Ala	Asn	Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro
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Asn	Leu	Leu	Arg	Ser	Met	Glu	Leu	Glu	Ser	Val	Gly	Met	Gly	Gly	Ala
	210					215					220				
Ala	Ala	Phe	Arg	Glu	Val	Arg	Val	Gln	Ser	Val	Val	Val	Glu	Phe	Leu

225					230					235				240
Leu	Thr	His	Val	Asp	Val	Leu	Phe	Ser	Asp	Thr	Phe	Thr	Ser	Ala
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	290					295					300			Lys
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Thr	Arg	Ala	Pro	Pro	Gln	Pro	Ser	Ala	Trp	Leu	Asp	Asp	Gly	Asp
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Pro	Pro	Ala	Val	Leu	Glu	Leu	Leu	Gly	Ala	Gly	Gly	Ala	Pro	Ala
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Ala	Thr	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Gly	Arg	Ser	Leu	Arg	Pro
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Leu	Ile	Pro	Leu	Leu	Leu	Arg	Gly	Ala	Glu	Ala	Pro	Leu	Thr	Asp
			485						490					Ala
Cys	Gln	Gln	Glu	Met	Cys	Ser	Lys	Leu	Arg	Gly	Ala	Gln	Gly	Pro
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	515						520					525		Ala
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		580						585				590		Asp
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Ser	Gln	Val	Pro	Thr	Pro	Gly	Phe	Phe	Ser	Pro	Ala	Pro	Arg	Glu
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 785 790 795 800  
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 850 855 860  
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&lt;210&gt; 5381

&lt;211&gt; 1576

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5381

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&lt;210&gt; 5382

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5382

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Ile	Ser	Gln	Ala	Trp	Pro	Gly	Met	Ala	Arg	Thr	Ile	Tyr	Gly	Asp	His
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Gln	Arg	Phe	Val	Asp	Ala	Tyr	Phe	Lys	Ala	Tyr	Pro	Gly	Tyr	Tyr	Phe
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Thr	Gly	Asp	Gly	Ala	Tyr	Arg	Thr	Glu	Gly	Gly	Tyr	Tyr	Gln	Ile	Thr

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Phe	Ile	Val	Val	Lys	Asp	Ser	Ala	Gly	Asp	Ser	Asp	Val	Val	Val	Gln
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Glu	Leu	Lys	Ser	Met	Val	Ala	Thr	Lys	Ile	Ala	Lys	Tyr	Ala	Val	Pro
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Asp	Glu	Ile	Leu	Val	Lys	Arg	Leu	Pro	Lys	Thr	Arg	Ser	Gly	Lys	
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&lt;210&gt; 5383

&lt;211&gt; 2027

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5383

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&lt;210&gt; 5384

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5384

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Phe	Pro	Lys	Val	Glu	Tyr	Ile	Ala	Arg	Ala	Gly	Ala	Trp	Ala	Met	Phe
		20						25				30			
Leu	Asp	Arg	Pro	Gln	Gln	Trp	Leu	Gln	Leu	Val	Leu	Leu	Pro	Pro	Ala
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Leu	Phe	Ile	Pro	Ser	Thr	Glu	Asn	Glu	Glu	Gln	Arg	Leu	Ala	Ser	Ala

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Arg 65	Ala	Val	Pro	Arg	Asn 70	Val	Gln	Pro	Tyr	Val 75	Val	Tyr	Glu	Glu	Val 80	
Thr	Asn	Val	Trp	Ile 85	Asn	Val	His	Asp	Ile 90	Phe	Tyr	Pro	Phe	Pro	Gln	
Ser	Glu	Gly	Glu	Asp 100	Glu	Leu	Cys	Phe	Leu 105	Arg	Ala	Asn	Glu	Cys	Lys	
Thr	Gly	Phe	Cys	His 115	Leu	Tyr	Lys	Val	Thr 120	Ala	Val	Leu	Lys	Ser	Gln	
Gly	Tyr	Asp	Trp	Ser 130	Glu	Pro	Phe	Ser	Pro 135	Gly	Glu	Gly	Glu	Gln	Ser	
Leu 145	Thr	Asn	Ala	Ile 150	Trp	Val	Asn	Glu	Glu 155	Thr	Lys	Leu	Val	Tyr	Phe	
Gln	Gly	Thr	Lys	Asp 165	Thr	Pro	Leu	Glu	His 170	His	Leu	Tyr	Val	Val	Ser	
Tyr	Glu	Ala	Ala	Gly 180	Glu	Ile	Val	Arg	Leu 185	Thr	Thr	Pro	Gly	Phe	Ser	
His	Ser	Cys	Ser	Met 195	Ser	Gln	Asn	Phe	Asp 200	Met	Phe	Val	Ser	His	Tyr	
Ser	Ser	Val	Ser	Thr 210	Pro	Pro	Cys	Val	His 215	Val	Tyr	Lys	Leu	Ser	Gly	
Pro 225	Asp	Asp	Asp	Pro 230	Leu	His	Lys	Gln	Pro 235	Arg	Phe	Trp	Ala	Ser	Met	
Met	Glu	Ala	Ala	Lys 245	Ile	Phe	His	Phe	His 250	Thr	Arg	Ser	Asp	Val	Arg	
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Ser 305	Leu	Gly	Tyr	Ala 310	Val	Val	Val	Ile	Asp 315	Gly	Arg	Gly	Ser	Cys	Gln	
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Gly	Phe	Ile	Asp	Leu 355	Ser	Arg	Val	Ala	Ile 360	His	Gly	Trp	Ser	Tyr	Gly	
Gly	Phe	Leu	Ser	Leu 370	Met	Gly	Leu	Ile	His 375	Lys	Pro	Gln	Val	Phe	Lys	
Val 385	Ala	Ile	Ala	Gly 390	Ala	Pro	Val	Thr	Val 395	Trp	Met	Ala	Tyr	Asp	Thr	
Gly	Tyr	Thr	Glu	Arg 405	Tyr	Met	Asp	Val	Pro 410	Glu	Asn	Asn	Gln	His	Gly	
Tyr	Glu	Ala	Gly	Ser 420	Val	Ala	Leu	His	Val 425	Glu	Lys	Leu	Pro	Asn	Glu	
Pro	Asn	Arg	Leu	Leu 435	Ile	Leu	His	Gly	Phe 440	Leu	Asp	Glu	Asn	Val	His	
Phe	Phe	His	Thr	Asn 450	Phe	Leu	Val	Ser	Gln 455	Leu	Ile	Arg	Ala	Gly	Lys	
Pro 465	Tyr	Gln	Leu	Gln 470	Val	Ala	Leu	Pro	Pro 475	Val	Ser	Pro	Gln	Ile	Tyr	
Pro	Asn	Glu	Arg	His	Ser	Ile	Arg	Cys	Pro	Glu	Ser	Gly	Glu	His	Tyr	





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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Glu Leu Cys Gly Leu Gln Ala Arg Phe Pro Leu Ser Trp Arg Asn Phe  
 50 55 60  
 Pro Ile Thr Phe Ala Cys Tyr Ala Ala Leu Phe Cys Leu Ser Ala Ser  
 65 70 75 80  
 Ile Ile Tyr Pro Thr Thr Tyr Val Gln Phe Leu Ser His Gly Arg Ser  
 85 90 95  
 Arg Asp His Ala Ile Ala Ala Thr Phe Phe Ser Cys Ile Ala Cys Val  
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&lt;210&gt; 5390

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5390

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Ile Met Gly Arg Glu Lys Leu Lys Ala Ala Asp Cys Asp Leu Gln Ile					
	35		40		45
Thr Asn Ala Gln Thr Lys Glu Glu Tyr Thr Asp Asp Asn Ala Leu Ile					
	50		55		60
Pro Lys Asn Ser Ser Val Ile Val Arg Arg Ile Pro Ile Gly Gly Val					
65			70		75
Lys Ser Thr Ser Lys Thr Tyr Val Ile Ser Arg Thr Glu Pro Ala Met					
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&lt;210&gt; 5393

&lt;211&gt; 4837

&lt;212&gt; DNA

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&lt;400&gt; 5393

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420

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<210> 5398

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5398

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			20				25					30			
Thr	Ser	Ile	Pro	Ile	Ser	Pro	Pro	Leu	Thr	Pro	Gln	Asp	Ala	Asn	Glu
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Ala	Gln	Gly	Trp	Ala	Glu	Ala	Gly	Arg	Ala	Val	His	Arg	Glu	Asp	Pro
	50				55					60					
Arg	Val	Ser	Leu	Gly	Leu	Pro	Arg	Trp	Leu	Cys	Pro	Pro	Phe	Cys	Leu
65				70					75					80	
Gly	Gly	Ser	Leu	Arg	Leu	Gly	Arg	Ala	Gln	Arg	Glu	Gly	Asp	Pro	Glu
			85					90					95		
Gly	Leu	Ala	Asp	Ser	Gly	Pro	Pro	Cys	Glu	Leu	Arg	Phe	Glu	Glu	Glu
		100					105					110			
Ser	Arg	Pro	Pro	Arg	Val	Val	Gly	Glu	Ser	Thr	Gly	Arg	Lys	Ala	Gly
		115				120						125			
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<210> 5399

<211> 835

<212> DNA

<213> Homo sapiens

<400> 5399

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atgtctcagg aaggctatgg aactagatct caacctcctc tggcccccgga aaaacctaac  
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600  
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<210> 5400  
<211> 186  
<212> PRT  
<213> Homo sapiens

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20 25 30  
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35 40 45  
Pro Gln Gln Ser Ser Pro Tyr Pro Gly Gly Ser Tyr Gly Pro Pro Gly  
50 55 60  
Pro Gln Arg Tyr Pro Ile Gly Ile Gln Gly Arg Thr Pro Gly Ala Met  
65 70 75 80  
Ala Gly Met Gln Tyr Pro Gln Gln Gln Met Pro Pro Gln Tyr Gly Gln  
85 90 95  
Gln Gly Val Ser Gly Tyr Cys Gln Gln Gly Gln Gln Pro Tyr Tyr Ser  
100 105 110  
Gln Gln Pro Gln Pro Pro His Leu Pro Pro Gln Ala Gln Tyr Leu Pro  
115 120 125  
Ser Gln Ser Gln Gln Arg Tyr Gln Pro Gln Gln Asp Met Ser Gln Glu  
130 135 140  
Gly Tyr Gly Thr Arg Ser Gln Pro Pro Leu Ala Pro Gly Lys Pro Asn  
145 150 155 160  
His Glu Asp Leu Asn Leu Ile Gln Gln Glu Arg Pro Ser Ser Leu Pro  
165 170 175  
Val Arg His Tyr Cys Ala Asp Leu Glu Met  
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<210> 5401  
<211> 2674  
<212> DNA  
<213> Homo sapiens

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180  
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240  
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420  
aagaaggaca aaaagttatc agacatgcat caaatagtaa atatagatct tatgctggaa  
480  
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720  
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900  
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 2160  
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 2580  
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 2674

&lt;210&gt; 5402

&lt;211&gt; 507

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5402

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			20					25					30		
Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
		35					40					45			
Phe	Arg	Ile	Arg	Gly	Gly	Leu	Asp	Leu	Ala	Phe	Gln	Leu	Ala	Thr	Pro
	50					55					60				
Asn	Glu	Ile	Phe	Leu	Lys	Lys	Ala	Leu	Lys	His	Val	Leu	Ser	Asp	Leu
65					70					75				80	
Ser	Thr	Lys	Leu	Ser	Ser	Asn	Ala	Leu	Val	Phe	Arg	Ile	Cys	His	Ser
			85					90						95	
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<212> DNA  
 <213> Homo sapiens

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<210> 5404  
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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Trp Val Gly Ala Leu Glu Leu Pro Arg Leu Gln Ala Pro Leu Ser Gln  
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 Pro Gly Thr His Ala Gly Ala Xaa Asp Pro Arg Pro Ser Leu Arg Lys  
 65 70 75 80  
 Ala Ser Leu Arg Ala Ala Ser Pro Ala Ala Ser Ser Ser Pro Trp Ala  
 85 90 95  
 Arg Val Pro Cys Ser Arg Ala Arg Arg Pro Lys Ser Ala Glu Leu Leu  
 100 105 110  
 Arg Ile Pro Gly Thr Ser Thr Arg Pro Lys Lys Glu Arg Gly Cys Pro  
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 130 135 140  
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<210> 5405  
 <211> 1609  
 <212> DNA  
 <213> Homo sapiens

<400> 5405

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120  
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180  
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240  
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420  
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 <211> 291  
 <212> PRT  
 <213> Homo sapiens

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 Ala Gln Cys Leu Arg Asn Gly Gln Val Ile Glu Pro Asp Lys Asn Arg  
 35 40 45  
 Lys Tyr Cys Ser Ala Lys Ala Arg His Ser Trp Thr Lys Asp Arg Arg  
 50 55 60  
 Ala Met Arg Val Met Ser Ile Glu Arg Lys Lys Trp Met Asn Ile Arg  
 65 70 75 80  
 Pro Leu Pro Thr Lys Lys Gln Met Pro Leu Gln Phe Asp Leu Cys Asn  
 85 90 95  
 His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe  
 100 105 110  
 Ala His Ser Pro Glu Glu Arg Glu Val Trp Thr Tyr Met Lys Glu Asn  
 115 120 125  
 Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln  
 130 135 140  
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 145 150 155 160  
 Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp  
 165 170 175  
 Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp  
 180 185 190  
 Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr  
 195 200 205  
 Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe  
 210 215 220  
 Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser  
 225 230 235 240  
 Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg  
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 Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu  
 260 265 270  
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<210> 5407  
 <211> 2010  
 <212> DNA  
 <213> Homo sapiens

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420  
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 1980  
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<210> 5408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 5408

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			20					25					30		
Lys	Glu	Met	Val	Leu	Ser	Glu	Lys	Val	Ser	Gln	Leu	Met	Glu	Trp	Thr
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Val	Lys	Ala	Pro	Pro	Arg	Asn	Tyr	Ser	Val	Ile	Val	Met	Phe	Thr	Ala
65					70					75					80
Leu	Gln	Leu	His	Arg	Gln	Cys	Val	Val	Cys	Lys	Gln	Ala	Asp	Glu	Glu
			85						90					95	
Phe	Gln	Ile	Leu	Ala	Asn	Ser	Trp	Arg	Tyr	Ser	Ser	Ala	Phe	Thr	Asn
			100					105						110	
Arg	Ile	Phe	Phe	Ala	Met	Val	Asp	Phe	Asp	Glu	Gly	Ser	Asp	Val	Phe
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Gln	Met	Leu	Asn	Met	Asn	Ser	Ala	Pro	Thr	Phe	Ile	Asn	Phe	Pro	Ala
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Asn	Ile	Arg	Val	Ile	Arg	Pro	Pro	Asn	Tyr	Ala	Gly	Pro	Leu	Met	Leu
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	210						215					220			
Cys	Phe	Val	Leu	Ala	Met	Thr	Ser	Gly	Gln	Met	Trp	Asn	His	Ile	Arg
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Gly	Pro	Pro	Tyr	Ala	His	Lys	Asn	Pro	His	Thr	Gly	His	Val	Asn	Tyr
			245						250					255	
Ile	His	Gly	Ser	Ser	Gln	Ala	Gln	Phe	Val	Ala	Glu	Thr	His	Ile	Val
			260					265					270		
Leu	Leu	Phe	Asn	Gly	Gly	Val	Thr	Leu	Gly	Met	Val	Leu	Leu	Cys	Glu

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&lt;210&gt; 5410

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5410

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Pro	Leu	Leu	Ala	Glu	Leu	Pro	Phe	Pro	Ser	Val	Leu	Glu	Ser	Glu	Glu
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&lt;210&gt; 5411

&lt;211&gt; 2802

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5411

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Met Ile Gly Asn Ile Phe Thr Gln Gln Pro Ser Tyr Tyr Ser Asp Leu
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Phe Cys Tyr Arg Leu Ala Ser Phe Tyr Glu Ala Ala Ile Pro Glu Met
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Glu Ser Ala Ile Lys Lys Arg Arg Leu Glu Asp Ser Lys Leu Leu Gly
          180          185          190
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Ser Cys Asp Asn Ile Gln Gly Phe Ile Glu Glu Phe Leu Gln Ile Phe
225          230          235          240
Ser Ser Leu Leu Gln Glu Lys Arg Phe Leu Arg Asp Tyr Asp Ala Leu
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Thr Ala Val Ala Gly Ser Pro Arg Gly His Gly Gln Ser Arg Glu Thr
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Thr Gln Glu Arg Arg Lys Lys Glu Ala Asn Lys Ala Thr Arg Ala Asn
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Pro Ser

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&lt;210&gt; 5413

&lt;211&gt; 1677

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5413

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<210> 5415

<211> 1493

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5415

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 <212> PRT  
 <213> Homo sapiens

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<210> 5417  
 <211> 2087  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5418

&lt;211&gt; 528

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5418

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 Arg Leu Leu Lys Glu Pro Glu Lys Glu Arg Asp Ser Asp Ser Asp Phe  
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 Arg His Ala Glu Asn Pro His His Pro Leu Lys Thr Ser Ser Arg Ala

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Lys	Gly	Pro	Val	Ala	Val	Thr	Gly	Ala	Ser	Thr	Pro	Glu	Gly	Thr	Ala		
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Thr	Ala	Ala	Pro	Ala	Ala	Met	Asp	Pro	Val	Val	Gly	Gln	Ala	Lys	Leu		
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Val	Met	Ser	Leu	Leu	Ser	Ala	Asn	Thr	Pro	Glu	Glu	Asp	Gln	Arg	Thr		
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Tyr	Val	Phe	Arg	Ala	Gln	Ser	Ala	Glu	Met	Lys	Glu	Arg	Gly	Gly	Asn		
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Gln	Thr	Ser	Gly	Ile	Asp	Phe	Phe	Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe		
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Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser	Pro	Ser	Ile	Leu	Asp	His	Leu	Ile		
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				290					295					300			
His	Val	Val	Ile	Val	Val	Gln	Asp	Trp	Phe	Thr	Asp	Leu	Ser	Leu	Tyr		
				305					310					315			
Arg	Leu	Trp	Asp	Leu	Gly	Cys	Lys	Cys	Lys	Ser	Asn	Ser	His	Ser	Pro		
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Thr	Glu	Tyr	Tyr	Pro	His	Leu	Val	Phe	Leu	Gln	Asn	Lys	Ala	Arg	Arg		
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Glu	Val	Asn	Leu	Phe	Leu	Val	Pro	Phe	Met	Asp	Ser	Glu	Ala	Glu	Ser		
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Glu	Asn	Pro	Pro	Arg	Ala	Gly	Pro	Gly	Ser	Ser	Pro	Leu	Phe	Ser	Leu		
				450					455					460			
Leu	Pro	Gly	Tyr	Arg	Gly	His	Pro	Ser	Phe	Gln	Ser	Leu	Val	Ser	Lys		
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Leu	Arg	Ser	Gln	Val	Met	Ser	Met	Ala									

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 <212> DNA  
 <213> Homo sapiens

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<210> 5420  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 5420  
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Thr Arg Arg Tyr Tyr Arg Ser Pro Ser Arg Tyr Arg Ser Arg Ser Arg
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Ser Arg Ser Arg Ser Arg Gly Arg Ser Tyr Cys Gly Arg Ala Tyr Ala
      65      70      75      80
Ile Ala Arg Gly Gln Arg Tyr Tyr Gly Phe Gly Arg Thr Val Tyr Pro
      85      90      95
Glu Glu His Ser Arg Trp Arg Asp Arg Ser Arg Thr Arg Ser Arg Ser
      100      105      110
Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg Met Glu Leu Leu Glu
      115      120      125
Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly Thr Thr Asn Ile Asp
      130      135      140
Leu Pro Ala Ser Leu Arg Thr Val Pro Ser Ala Lys Glu Thr Ser Arg
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Gly Ile Gly Val Ser Ser Asn Gly Ala Lys Pro Glu Lys Ser
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&lt;210&gt; 5421

&lt;211&gt; 1239

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5421

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&lt;210&gt; 5422

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5422

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Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr	Cys
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Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser	Met
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65					70					75					80
Ile	Ile	Leu	Ile	Val	Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu
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Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe
			100					105					110		
Cys	Leu	Ser	Ala	Ser	Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe	Leu
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Ser	His	Gly	Arg	Ser	Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser
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Cys	Ile	Ala	Cys	Val	Ala	Tyr	Ala	Thr	Glu	Val	Ala	Trp	Thr	Arg	Ala
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Arg	Pro	Gly	Glu	Ile	Thr	Gly	Tyr	Met	Ala	Thr	Val	Pro	Gly	Leu	Leu
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Lys	Val	Leu	Glu	Thr	Phe	Val	Ala	Cys	Ile	Ile	Phe	Ala	Phe	Ile	Ser
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Asp	Pro	Asn	Leu	Tyr	Gln	His	Gln	Pro	Ala	Leu	Glu	Trp	Cys	Val	Ala
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Val	Tyr	Ala	Ile	Cys	Phe	Ile	Leu	Ala	Ala	Ile	Ala	Ile	Leu	Leu	Asn
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Ser	Gly	Leu	Ala	Leu	Cys	Leu	Ser	Ser	Ser	Met	Pro	Pro	Pro	Leu	Phe
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260

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270

<210> 5423  
<211> 2427  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 5423

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1320

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&lt;210&gt; 5424

&lt;211&gt; 570

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5424

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			20					25					30		
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp	Lys
		35					40					45			
Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln	Lys
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Lys	Ala	Leu	Ser	Lys	Thr	Ser	Lys	Val	Arg	Pro	Ser	Thr	Gly	Asn	Ser

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Ala	Ser	Thr	Pro	Gln	Ser	Gln	Cys	Leu	Pro	Ser	Glu	Ile	Glu	Val
				85					90					95
Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp
			100					105					110	
Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys
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Asn	Met	Met	Leu	Ala	Asn	Leu	Tyr	Lys	Lys	Ala	Gly	Gln	Glu	Arg
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Ser	Val	Thr	Ser	Tyr	Lys	Glu	Val	Leu	Arg	Gln	Cys	Pro	Leu	Ala
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Ala	Ser	Met	Thr	Met	Asn	Val	Ile	Gln	Thr	Val	Pro	Asn	Leu	Asp
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Leu	Ser	Val	Trp	Ile	Lys	Ala	Tyr	Ala	Phe	Val	His	Thr	Gly	Asp
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Phe	Asn	Ile	Ser	Asp	Gln	His	Ala	Glu	Pro	Trp	Val	Val	Ser	Gly
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Tyr	Glu	Asp	Gly	Ile	Ala	Leu	Leu	Arg	Asn	Ala	Leu	Ala	Asn	Gln
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Glu	Tyr	Gln	Glu	Ala	Met	Asp	Gln	Tyr	Ser	Ile	Ala	Leu	Ser	Leu
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Pro	Asn	Asp	Gln	Lys	Ser	Leu	Glu	Gly	Met	Gln	Lys	Met	Glu	Lys
														Glu



			500				505				510				
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Gly	Ser	Gly	Glu	Glu	Gly	Asp	Leu	Glu	Gly	Ser	Asp	Ser	Glu	Ala	Ala
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Gln	Trp	Ala	Asp	Gln	Glu	Gln	Trp	Phe	Gly	Met	Ser	Glu	Gly	Ala	Ala
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<212> DNA
<213> Homo sapiens
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<212> PRT
<213> Homo sapiens
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			20					25					30		
Ser	Cys	Asp	Arg	Gly	Cys	Leu	Ala	Ala	Ile	Leu	Ala	Ser	Thr	Ser	Ala
		35				40						45			
Thr	Gln	Ala	Arg	Met	Cys	Pro	Val	Leu	Arg	Cys	Cys	Ser	Glu	Phe	Ile
	50					55					60				
Glu	Ala	Xaa	Gly	Val	Val	Asp	Gly	Ile	Tyr	Arg	Leu	Ser	Gly	Val	Ser



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 <212> PRT  
 <213> Homo sapiens

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 His Glu Glu Glu Val Arg Val Pro Ala Leu Ser Trp Gly Arg Pro Arg  
 35 40 45  
 Ala Pro Ala Pro Ala Ser Lys Pro Arg Pro Arg Leu Asp Leu Asn Cys  
 50 55 60  
 Leu Trp Leu Arg Pro Gln Pro Ile Phe Leu Trp Lys Leu Arg Pro Arg  
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 <211> 3005  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5432

&lt;211&gt; 863

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5432

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				20				25					30		
Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

4614

465					470					475				480	
Ala	Glu	Arg	Ala	Gln	Gln	Val	Ala	Glu	Gln	Gln	Ser	Gln	Gln	Glu	Cys
				485					490					495	
Gly	Gly	Thr	Pro	Pro	Ala	Ser	Gln	Ser	Pro	Phe	His	Arg	Ser	Leu	Ser
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Leu	Glu	Val	Gly	Gly	Glu	Pro	Leu	Gly	Thr	Ser	Gly	Ser	Gly	Pro	Pro
		515					520					525			
Pro	Asn	Ser	Leu	Ala	His	Pro	Gly	Ala	Trp	Val	Pro	Gly	Pro	Pro	Pro
	530					535					540				
Tyr	Leu	Pro	Arg	Gln	Gln	Ser	Asp	Gly	Ser	Leu	Leu	Arg	Ser	Gln	Arg
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Pro	Met	Gly	Thr	Ser	Arg	Arg	Gly	Leu	Arg	Gly	Pro	Ala	Gln	Val	Ser
			565					570						575	
Ala	Gln	Leu	Arg	Ala	Gly	Gly	Gly	Gly	Arg	Asp	Ala	Pro	Glu	Ala	Ala
		580					585						590		
Ala	Gln	Ser	Pro	Cys	Ser	Val	Pro	Ser	Gln	Val	Pro	Thr	Pro	Gly	Phe
	595						600					605			
Phe	Ser	Pro	Ala	Pro	Arg	Glu	Cys	Leu	Pro	Pro	Phe	Leu	Gly	Val	Pro
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Lys	Pro	Gly	Leu	Tyr	Pro	Leu	Gly	Pro	Pro	Ser	Phe	Gln	Pro	Ser	Ser
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Pro	Ala	Pro	Val	Trp	Arg	Ser	Ser	Leu	Gly	Pro	Pro	Ala	Pro	Leu	Asp
			645				650							655	
Arg	Gly	Glu	Asn	Leu	Tyr	Tyr	Glu	Ile	Gly	Ala	Ser	Glu	Gly	Ser	Pro
		660					665						670		
Tyr	Ser	Gly	Pro	Thr	Arg	Ser	Trp	Ser	Pro	Phe	Arg	Ser	Met	Pro	Pro
	675					680						685			
Asp	Arg	Leu	Asn	Ala	Ser	Tyr	Gly	Met	Leu	Gly	Gln	Ser	Pro	Pro	Leu
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His	Arg	Ser	Pro	Asp	Phe	Leu	Leu	Ser	Tyr	Pro	Pro	Ala	Pro	Ser	Cys
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Phe	Pro	Pro	Asp	His	Leu	Gly	Tyr	Ser	Ala	Pro	Gln	His	Pro	Ala	Arg
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		740					745						750		
Arg	Gly	Pro	Ser	Pro	Ala	Ser	Ser	Ser	Ser	Ser	Ser	Pro	Pro	Ala	His
	755					760						765			
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	770					775					780				
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785				790					795						800
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			805					810						815	
Ala	Tyr	Gly	Arg	Gly	Gly	Glu	Leu	His	Arg	Gly	Ser	Leu	Tyr	Arg	Asn
		820					825						830		
Gly	Gly	Gln	Arg	Gly	Glu	Gly	Ala	Gly	Pro	Pro	Pro	Pro	Tyr	Pro	Thr
		835					840					845			
Pro	Ser	Trp	Ser	Leu	His	Ser	Glu	Gly	Gln	Thr	Arg	Ser	Tyr	Cys	
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&lt;210&gt; 5433

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5433

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&lt;210&gt; 5434

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5434

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		20				25					30				
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
		35				40					45				
Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50					55				60					
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
65				70					75					80	
Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
			85					90					95		
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
		100				105					110				
Pro	Pro	Val	Ser	Pro	Leu	Thr	Leu	Ser	Pro	Gly	Pro	Glu	Ala	His	Gln
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&lt;210&gt; 5435

&lt;211&gt; 617

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5435

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&lt;210&gt; 5436

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5436

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Lys	Asn	Asn	His	Ile	Arg	Ser	Cys	Arg	Ala	Val	Leu	His	Arg	Ser	Asp
	50					55					60				
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65					70				75					80	
Asn	Arg	Asn	His	Glu	Pro	Gly	Arg	Glu	Met	Gly	Leu	Glu	Lys	Gly	Glu
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Glu	Asn	Trp	Met	Ser	Asp	Ile	Ser	Glu	Thr	Gln	Asp	Pro	Phe	Leu	Gln
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&lt;210&gt; 5437

&lt;211&gt; 1422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5437

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&lt;210&gt; 5438

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5438

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		20					25					30		Leu
Leu	Gln	Val	Val	Arg	Glu	Gly	Lys	Phe	Ser	Gly	Phe	Leu	Thr	Ser
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Ser	Leu	Leu	Leu	Pro	Arg	Ala	Ala	Gln	Ile	Leu	Ala	Ala	Glu	Ala
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Leu	Pro	Ser	Ser	Arg	Ser	Phe	Met	Gly	Phe	Ala	Ala	Pro	Phe	Thr
													Asn	

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Lys	Arg	Lys	Ala	Tyr	Ser	Glu	Arg	Arg	Ile	Met	Gly	Tyr	Ser	Met	Gln
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Glu	Met	Tyr	Glu	Val	Val	Ser	Asn	Val	Gln	Glu	Tyr	Arg	Glu	Phe	Val
			100					105					110		
Pro	Trp	Cys	Lys	Lys	Ser	Leu	Val	Val	Ser	Ser	Arg	Lys	Gly	His	Leu
		115					120					125			
Lys	Ala	Gln	Leu	Glu	Val	Gly	Phe	Pro	Pro	Val	Met	Glu	Arg	Tyr	Thr
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Ser	Ala	Val	Ser	Met	Val	Lys	Pro	His	Met	Val	Lys	Ala	Val	Cys	Thr
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Asp	Gly	Lys	Leu	Phe	Asn	His	Leu	Glu	Thr	Ile	Trp	Arg	Phe	Ser	Pro
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Gly	Ile	Pro	Ala	Tyr	Pro	Arg	Thr	Cys	Thr	Val	Asp	Phe	Ser	Ile	Ser
		180						185					190		
Phe	Glu	Phe	Arg	Ser	Leu	Leu	His	Ser	Gln	Leu	Ala	Thr	Met	Phe	Phe
		195					200					205			
Asp	Glu	Val	Val	Lys	Gln	Asn	Val	Ala	Ala	Phe	Glu	Arg	Arg	Ala	Ala
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Thr	Lys	Phe	Gly	Pro	Glu	Thr	Ala	Ile	Pro	Arg	Glu	Leu	Met	Phe	His
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Glu	Val	His	Gln	Thr											
				245											

&lt;210&gt; 5439

&lt;211&gt; 4234

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5439

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<211> 461

<212> PRT

<213> Homo sapiens

<400> 5440

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			20					25					30		
Gln	Arg	Met	Leu	Asn	Arg	Arg	Pro	Glu	Ile	Val	Val	Ala	Thr	Pro	Gly
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Arg	Gln	Leu	Arg	Cys	Leu	Val	Val	Asp	Glu	Ala	Asp	Arg	Met	Val	Glu
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Lys	Gly	His	Phe	Ala	Glu	Leu	Ser	Gln	Leu	Leu	Glu	Met	Leu	Asn	Asp
				85					90					95	
Ser	Gln	Tyr	Asn	Pro	Lys	Arg	Gln	Thr	Leu	Val	Phe	Ser	Ala	Thr	Leu
			100					105					110		
Thr	Leu	Val	His	Gln	Ala	Pro	Ala	Arg	Ile	Leu	His	Lys	Lys	His	Thr
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Lys	Lys	Met	Asp	Lys	Thr	Ala	Lys	Leu	Asp	Leu	Leu	Met	Gln	Lys	Ile
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Gly	Met	Arg	Gly	Lys	Pro	Lys	Val	Ile	Asp	Leu	Thr	Arg	Asn	Glu	Ala
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225					230					235				240	
Cys	Val	Leu	Leu	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Leu	Asp	Ile	Pro
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Tyr	Val	His	Arg	Ser	Gly	Arg	Thr	Ala	Arg	Ala	Thr	Asn	Glu	Gly	Leu
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Thr Lys Tyr Met Asp Val Val Lys Glu Arg Ile Arg Leu Ala Arg Gln
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Ile Glu Lys Ser Glu Tyr Arg Asn Phe Gln Ala Cys Leu His Asn Ser
      340              345              350
Trp Ile Glu Gln Ala Ala Ala Ala Leu Glu Ile Glu Leu Glu Glu Asp
      355              360              365
Met Tyr Lys Gly Gly Lys Ala Asp Gln Gln Glu Glu Arg Arg Arg Gln
      370              375              380
Lys Gln Met Lys Val Leu Lys Lys Glu Leu Arg His Leu Leu Ser Gln
385              390              395              400
Pro Leu Phe Thr Glu Ser Gln Lys Thr Lys Tyr Pro Thr Gln Ser Gly
      405              410              415
Lys Pro Pro Leu Leu Val Ser Ala Pro Ser Lys Ser Glu Ser Ala Leu
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 <213> Homo sapiens

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&lt;210&gt; 5442

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5442

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			20					25					30		
Lys	Asn	Lys	Val	Val	Gly	Trp	Arg	Ser	Gly	Val	Glu	Lys	Asp	Leu	Asp
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Thr	Glu	Ile	Cys	Lys	Gln	Ile	Leu	Thr	Lys	Gly	Glu	Val	Gln	Val	Ser
				85					90					95	
Asp	Lys	Glu	Arg	His	Thr	Gln	Leu	Glu	Gln	Met	Phe	Arg	Asp	Ile	Ala
			100					105					110		
Thr	Ile	Val	Ala	Asp	Lys	Cys	Val	Asn	Pro	Glu	Thr	Lys	Arg	Pro	Tyr
			115				120						125		
Thr	Val	Ile	Leu	Ile	Glu	Arg	Ala	Met	Lys	Asp	Ile	His	Tyr	Ser	Val



130		135		140
Lys Thr Asn Lys Ser Thr	Lys Gln Gln Ala Leu	Glu Val Ile Lys Gln		
145	150	155	160	
Leu Lys Glu Lys Met Lys	Ile Glu Arg Ala His	Met Arg Leu Arg Phe		
	165	170	175	
Ile Leu Pro Val Asn Glu	Gly Lys Lys Leu Lys	Glu Lys Leu Lys Pro		
	180	185	190	
Leu Ile Lys Val Ile Glu	Ser Glu Asp Tyr Gly	Gln Gln Leu Glu Ile		
	195	200	205	
Val Cys Leu Ile Asp Pro	Gly Cys Phe Arg Glu	Ile Asp Glu Leu Ile		
	210	215	220	
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<210> 5443  
 <211> 2021  
 <212> DNA  
 <213> Homo sapiens

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 2021

&lt;210&gt; 5444

&lt;211&gt; 438

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5444

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Leu	Asp	Met	Leu	Asn	Asn	Trp	Asp	Lys	Trp	Met	Ala	Lys	Lys	His	Lys
			20					25					30		
Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
			35					40					45		
Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
			50					55					60		
Pro	Gly	Lys	Phe	Asp	Glu	Leu	Asp	Met	Ser	Pro	Gly	Asp	Pro	Lys	Trp
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<210> 5445
<211> 1187
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 5446

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5446

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			20					25					30		
Arg	Lys	Thr	Gly	Trp	Arg	Phe	Leu	Arg	Arg	Ser	Thr	His	Ser	Arg	His
		35					40					45			
Gly	Thr	Gln	Trp	Phe	His	Pro	Gln	Val	Cys	Ser	Asn	Arg	His	His	Ser
	50					55					60				
Pro	Arg	Pro	His	Ala	Asp	Ser	Asp	Thr	Arg	Ala	His	Ser	Pro	Arg	Ser

65					70					75					80
His	Ala	Asp	Ser	Asp	Met	Arg	Ala	His	Ser	Leu	Ser	His	Asp	Ser	Gln
				85					90					95	
Thr	Val	Glu	Thr	Arg	Gln	Val	Gly	Leu	Gly	Cys					
			100				105								

<210> 5447  
 <211> 1444  
 <212> DNA  
 <213> Homo sapiens

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 1444

<210> 5448

<211> 189

<212> PRT

<213> Homo sapiens

<400> 5448

Gly	Ile	Asp	Asp	Leu	Ile	Val	Val	Leu	Cys	Ser	Lys	Lys	Thr	Phe	Gln
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			20					25					30		
Ala	Leu	His	Ser	Ala	Leu	Gly	Gly	Thr	Lys	Lys	Lys	Lys	Lys	Thr	Ile
		35				40						45			
Val	Thr	Asp	Val	Phe	Gln	Gly	Ser	Met	Arg	Ile	Phe	Thr	Lys	Lys	Leu
	50				55				60						
Pro	His	Pro	Asp	Leu	Pro	Ala	Glu	Glu	Lys	Glu	Gln	Leu	Leu	His	Asn
65				70					75					80	
Asp	Glu	Tyr	Gln	Glu	Thr	Met	Val	Glu	Ser	Thr	Phe	Met	Tyr	Leu	Thr
			85					90					95		
Leu	Asp	Leu	Pro	Thr	Ala	Pro	Leu	Tyr	Lys	Asp	Glu	Lys	Glu	Gln	Leu
			100				105						110		
Ile	Ile	Pro	Gln	Val	Pro	Leu	Phe	Asn	Ile	Leu	Ala	Lys	Phe	Asn	Gly
	115					120						125			
Ile	Thr	Glu	Lys	Glu	Tyr	Lys	Thr	Tyr	Lys	Glu	Asn	Phe	Leu	Lys	Arg
	130					135					140				
Phe	Gln	Leu	Thr	Lys	Leu	Pro	Pro	Tyr	Leu	Ile	Phe	Cys	Ile	Lys	Arg
145				150				155						160	
Phe	Thr	Lys	Asn	Asn	Phe	Phe	Val	Glu	Lys	Asn	Pro	Thr	Xaa	Cys	Gln
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<210> 5449

<211> 1359

<212> DNA

<213> Homo sapiens

<400> 5449

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&lt;210&gt; 5450

&lt;211&gt; 293

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5450

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			20				25						30		
Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser
		35				40					45				
Pro	Ser	Ile	Leu	Asp	His	Leu	Ile	Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro
	50				55					60					
Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	Val	Glu	Met	Gln	Ser	Leu	Gln	Ile

65					70					75				80	
Ala	Ala	Phe	Leu	Phe	Thr	Val	Cys	His	Val	Gly	Ile	Xaa	Val	Gln	Asp
				85						90				95	
Trp	Phe	Thr	Asp	Leu	Ser	Leu	Tyr	Arg	Phe	Leu	Gln	Thr	Ala	Glu	Met
			100					105					110		
Val	Lys	Pro	Ser	Thr	Pro	Ser	Pro	Ser	His	Glu	Ser	Ser	Ser	Ser	Ser
		115					120					125			
Gly	Ser	Asp	Glu	Gly	Thr	Glu	Tyr	Tyr	Pro	His	Leu	Val	Phe	Phe	Gln
		130				135					140				
Asn	Lys	Ala	Arg	Arg	Glu	Asp	Phe	Cys	Pro	Arg	Lys	Leu	Arg	Gln	Met
145					150					155				160	
His	Leu	Met	Ile	Asp	Gln	Leu	Met	Ala	His	Ser	His	Leu	Arg	Tyr	Lys
			165					170					175		
Gly	Thr	Leu	Ser	Met	Leu	Gln	Cys	Asn	Val	Phe	Pro	Gly	Leu	Pro	Pro
		180					185					190			
Asp	Phe	Leu	Asp	Ser	Glu	Val	Asn	Leu	Phe	Leu	Val	Pro	Phe	Met	Asp
		195					200					205			
Ser	Glu	Ala	Glu	Ser	Glu	Asn	Pro	Pro	Arg	Ala	Gly	Pro	Gly	Ser	Ser
	210					215					220				
Pro	Leu	Phe	Ser	Leu	Leu	Pro	Gly	Tyr	Arg	Gly	His	Pro	Ser	Phe	Gln
225					230				235					240	
Ser	Leu	Val	Ser	Lys	Leu	Arg	Ser	Gln	Val	Met	Ser	Met	Ala	Arg	Pro
			245					250					255		
Gln	Leu	Ser	His	Thr	Ile	Leu	Thr	Glu	Lys	Asn	Trp	Phe	His	Tyr	Ala
		260					265					270			
Ala	Arg	Ile	Trp	Asp	Gly	Val	Arg	Lys	Ser	Ser	Ala	Leu	Ala	Glu	Tyr
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Ser	Arg	Leu	Leu	Ala											
	290														

&lt;210&gt; 5451

&lt;211&gt; 1184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5451

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa  
 1184

&lt;210&gt; 5452

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5452

Met	Ser	Ser	Val	Tyr	Pro	Arg	Pro	Leu	Glu	Gly	Glu	Ser	Arg	Ala	Leu
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Arg	Lys	Gly	Ser	His	Leu	Leu	Ser	Leu	Ala	Glu	Pro	Leu	Pro	Pro	Tyr
			20					25					30		
Ser	Ser	Pro	Glu	Leu	Ser	Val	Ala	Phe	His	His	Ser	Gly	Pro	Ser	Cys
		35					40					45			
Leu	Ser	Pro	Ala	Leu	Ser	Gln	Thr	Thr	Gln	Lys	Ser	Gly	His	Leu	Trp
		50				55					60				
Ala	Pro	Gly	Met	Val	Thr	Glu	Glu	Lys	His	Ala	Val	Pro	Val	Ser	Pro
65					70				75					80	
Gly	Phe	Cys	Gln	Lys	Ile	Glu	Gln	Val	Gln	Leu	Thr	His	Cys	Tyr	Cys
			85					90						95	
Arg	Ser	Leu	Lys	Leu	Pro	Gly	Leu	Val	Leu	Asp	Pro	Ser	Arg	Asn	His
		100					105						110		
Gln	Val	Arg	His	Leu	Glu	Pro	Pro	Gly	Glu	Gly	Pro	Pro	Ser	Arg	Ala
		115				120						125			
Leu	Lys	Glu	Leu	His	Glu	Ile	Arg	Asn	Cys	Leu	Met	Lys	Cys	Ile	Ser
		130				135					140				
Leu	Tyr	Leu	Glu	Asp	Glu	Ala	Gln	Thr	Pro	Thr	Pro	Leu	Ser	Pro	Pro
145					150				155					160	
Gly	Leu	Gly	Met	Ser	Pro	Ala	Ala	Arg	Pro	Arg	Ser	Phe	Pro	Gly	Gly
			165					170						175	
Leu	Gly	Glu	Val	Gly	Ala	Gly	Thr	Ile	Ser	Val	Pro	Ser	Thr	Leu	Thr
			180				185						190		
Pro	Ser	Thr	Ser	Glu	Thr	Thr	Leu	Pro	Gln	Pro	Asp	Thr	Glu		

195 200 205

<210> 5453  
 <211> 1974  
 <212> DNA  
 <213> Homo sapiens

<400> 5453  
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 420  
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 600  
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 720  
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 780  
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 840  
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 1320  
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 1380

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 1800  
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 1860  
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 1920  
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 1974

<210> 5454  
 <211> 320  
 <212> PRT  
 <213> Homo sapiens

<400> 5454  
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 Arg Ile Asp Ser Lys Ala Trp Arg Glu Thr Leu Thr Leu Gln Lys Gln  
 35 40 45  
 Leu Arg Tyr Arg Phe Pro Glu Leu Ala Asp Pro Asp Thr Cys Tyr Gly  
 50 55 60  
 Phe Arg Phe Cys His Gln Leu Asp Phe Ser Thr Ser Gly Ala Leu Cys  
 65 70 75 80  
 Val Ala Leu Asn Lys Ala Ala Ala Gly Ser Ala Tyr Arg Cys Phe Lys  
 85 90 95  
 Glu Arg Arg Val Thr Lys Ala Tyr Leu Ala Leu Leu Arg Gly His Ile  
 100 105 110  
 Gln Glu Ser Arg Val Thr Ile Ser His Ala Ile Gly Arg Asn Ser Thr  
 115 120 125  
 Glu Gly Arg Ala His Thr Met Cys Ile Glu Gly Ser Gln Gly Val Ala  
 130 135 140  
 Gly Cys Glu Asn Pro Lys Pro Ser Leu Thr Asp Leu Val Val Leu Glu  
 145 150 155 160  
 His Gly Leu Tyr Ala Gly Asp Pro Val Ser Lys Val Leu Leu Lys Pro  
 165 170 175  
 Leu Thr Gly Arg Thr His Gln Leu Arg Val His Cys Ser Ala Leu Gly  
 180 185 190  
 His Pro Val Val Gly Asp Leu Thr Tyr Gly Glu Val Ser Gly Arg Glu  
 195 200 205  
 Asp Arg Pro Phe Arg Met Met Leu His Ala Phe Tyr Leu Arg Ile Pro

210		215		220
Thr Asp Thr Glu Cys Val	Glu Val Cys Thr Pro	Asp Pro Phe Leu Pro		
225		230		240
Ser Leu Asp Ala Cys Trp	Ser Pro His Thr Leu	Leu Gln Ser Leu Asp		
		250		255
Gln Leu Val Gln Ala Leu	Arg Ala Thr Pro Asp	Pro Asp Pro Glu Asp		
		265		270
Arg Gly Pro Arg Pro Gly	Ser Pro Ser Ala Leu	Leu Pro Gly Pro Gly		
		280		285
Arg Pro Pro Pro Pro Pro	Thr Lys Pro Pro Glu	Thr Glu Ala Gln Arg		
		300		
Gly Pro Cys Leu Gln Trp	Leu Ser Glu Trp Thr	Leu Glu Pro Asp Ser		
305		315		320

&lt;210&gt; 5455

&lt;211&gt; 975

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5455

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240
agctagaatt accattagag gcacaaaccc ctgagaatac acaagggggc acgcttcag
300
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420
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720
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840
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gccctcgccg cggcg
975

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<210> 5456  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 5456  
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 Val Cys Ala Gly Ser Arg Leu Phe Pro Val Ser Asn Trp Leu Val Ser  
 20 25 30  
 Leu Tyr Gly Leu Ala Ser Phe Arg Pro Gly Val Gly Pro His Pro Thr  
 35 40 45  
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr  
 50 55 60  
 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala  
 65 70 75 80  
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe  
 85 90 95  
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser  
 100 105 110  
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His  
 115 120 125  
 Arg Thr Tyr Asn Pro Gln Ser His Ile Ile Ser Gly Gly Leu Ala Gly  
 130 135 140  
 Ala Leu Ala Ala Ala  
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<210> 5457  
 <211> 448  
 <212> DNA  
 <213> Homo sapiens

<400> 5457  
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 240  
 ccctgaacct gatgctactt attttgcagt tctaagtga aagtcggcct ggtggatgct  
 300  
 tccattata atattaaatt tgcttcttcg tgaggtcaca cctcacatcc ccagtgtcac  
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 420  
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<210> 5458  
 <211> 81  
 <212> PRT

<213> Homo sapiens

<400> 5458

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Arg Ser Gly Ser Val Gly Ser Gln Ala Val Ala Arg Arg Met Asp Gly
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Asp Ser Arg Asp Gly Gly Gly Gly Lys Asp Ala Thr Gly Ser Glu Asp
      20           25          30
Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala
      35           40          45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
      50           55          60
Ser Val Lys Val Met Trp Thr Val Glu Leu Cys Ala Gly His Phe Gln
65           70           75          80
Pro

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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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120
cggatggagc tgcgcagcgg gagcgtgggc agccaggcgg tggcgcggag gatggatggg
180
gacagccgag atggcggcgg cggcaaggac gccaccgggt cggaggacta cgagaacctg
240
ccgactagcg cctccgtgtc caccacatg acagcaggag cgatggccgg gatcctggag
300
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420
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480
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540
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720
cacgcacaca cgcgcgcgc cacacacatg cttttttctg tccccctccg ctttctgaag
780
cctgggggaga aatcagtgc agaggtgttt tggttttatt gttatgtggg ttttcttttg
840
tatttttttt gtttgttttg tttttaaaca ttcaaaagca attaatgatc agacatagga
900
gaaaccctga atagaaacaa aacttttgaa tgctggattc aaaaaaaaaa aaaagttatc
960

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 ctaactaagc tttaaaaggt caagaagttt tatggctgac aaaggactcg cgcaacgcag  
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 1140  
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 1320  
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 1380  
 tgaatttttt actacgttat caaaggctc aagaaaggac gtgaacataa gagtttttgg  
 1440  
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 1468

<210> 5460  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 5460  
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 20 25 30  
 Ser Glu Asp Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His  
 35 40 45  
 Met Thr Ala Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr  
 50 55 60  
 Pro Val Asp Ser Val Lys Thr Arg Met Gln Ser Leu Ser Pro Asp Pro  
 65 70 75 80  
 Lys Ala Gln Tyr Thr Ser Ile Tyr Gly Ala Leu Lys Lys Ile Met Gln  
 85 90 95  
 Thr Glu Gly Phe Trp Arg Pro Leu Arg Gly Val Asn Val Met Ile Met  
 100 105 110  
 Gly Ala Gly Pro Ala His Ala Met Tyr Phe Ala Cys Tyr Glu Asn Met  
 115 120 125  
 Lys Arg Thr Leu Asn Asp Val Phe His His Gln Gly Asn Ser His Leu  
 130 135 140  
 Ala Asn Gly Ile Leu Lys Ala Phe Val Trp Ser  
 145 150 155

<210> 5461  
 <211> 1725  
 <212> DNA  
 <213> Homo sapiens

<400> 5461  
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120  
ccgggaggca gcaacgcaag gagccaaaat agtttctttg ccggaatgct ttaattctcc  
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atatggagcg aaatatcttc ctgaatatgc agagaaaatt cctgggtgaat ccacacagaa  
240  
gctttctgaa gtagcaaagg aatgcagcat atatctcatt ggaggtaact tcctaccac  
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360  
ctgatggaac ttactagca aagtatagaa agatccatct gtttgacatt gatgttcctg  
420  
gaaaaattac atttcaagaa tctaaaacat tgagtccggg tgatagtttc tccacatttg  
480  
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1680



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1725

<210> 5462

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5462

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			20					25					30		
Leu	Gly	Ile	Cys	Tyr	Asp	Met	Arg	Phe	Ala	Glu	Leu	Ala	Gln	Ile	Tyr
		35					40					45			
Ala	Gln	Arg	Gly	Cys	Gln	Leu	Val	Tyr	Pro	Gly	Ala	Phe	Asn	Leu	
	50					55				60					
Thr	Thr	Gly	Pro	Ala	His	Trp	Glu	Leu	Leu	Gln	Arg	Ser	Arg	Ala	Val
65					70					75					80
Asp	Asn	Gln	Val	Tyr	Val	Ala	Thr	Ala	Ser	Pro	Ala	Arg	Asp	Asp	Lys
				85					90				95		
Ala	Ser	Tyr	Val	Ala	Trp	Gly	His	Ser	Thr	Val	Val	Asn	Pro	Trp	Gly
			100					105				110			
Glu	Val	Leu	Ala	Lys	Ala	Gly	Thr	Glu	Glu	Ala	Ile	Val	Tyr	Ser	Asp
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Ile	Asp	Leu	Lys	Lys	Leu	Ala	Glu	Ile	Arg	Gln	Gln	Ile	Pro	Val	Phe
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Arg	Gln	Lys	Arg	Ser	Asp	Leu	Tyr	Ala	Val	Glu	Met	Lys	Lys	Pro	
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<210> 5463

<211> 792

<212> DNA

<213> Homo sapiens

<400> 5463

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180  
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240  
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300  
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420  
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480  
gggatagctg ggagtatggc caccctgtct cacgatgcgg taatgaatcc agcagaagtg  
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 792

<210> 5464  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 5464  
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 Gln Met Tyr Asn Ser Gln His Arg Ser Ala Ile Ser Cys Ile Arg Thr  
 35 40 45  
 Val Trp Arg Thr Glu Gly Leu Gly Ala Phe Tyr Arg Ser Tyr Thr Thr  
 50 55 60  
 Gln Leu Thr Met Asn Ile Pro Phe Gln Ser Ile His Phe Ile Thr Tyr  
 65 70 75 80  
 Glu Phe Leu Gln Glu Gln Val Asn Pro His Arg Thr Tyr Asn Pro Gln  
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 100 105 110

<210> 5465  
 <211> 497  
 <212> DNA  
 <213> Homo sapiens

<400> 5465  
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gcagccacgc agtgcac

497

<210> 5466

<211> 134

<212> PRT

<213> Homo sapiens

<400> 5466

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Met Ala Pro Pro Leu Gln Gly Pro Gly Gly Ala Ala Gly Gly Arg Thr
 1           5           10           15
Asp Gly Gln Ala Ala Trp Val Ala Gly Pro Arg Lys Ala Gly Val Asp
           20           25           30
Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser
           35           40           45
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile
           50           55           60
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg
65           70           75           80
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro
           85           90           95
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro
           100          105          110
Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro
           115          120          125
Gly Gln Pro Arg Ser Ala
           130

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<210> 5467

<211> 1329

<212> DNA

<213> Homo sapiens

<400> 5467

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cccggatcca gcttcttgga cttgggggat ctgaacgagt cggacttcct caacaatgcg
180
cactttcctg agcacctgga ccactttacg gagaacatgg aggacttctc caatgacctg
240
ttcagcagct tctttgatga ccctgtgctg gatgagaaga gccctctatt ggacatggaa
300
ctggactccc ctacgccagg catccaggcg gagcacagct actccctgag cggcgactca
360
gcgccccaga gcccccttgt gcccatcaag atggaggaca ccaccaaga tgcagagcat
420
ggagcatggg cgctgggaca caaactgtgc tccatcatgg tgaagcagga gcagagcccg
480
gagctgcccg tggacctctt ggctgcccc cggccatgg ctgccgcggc cgccatggcc
540
accacccgcg tgetgggect cagccccttg tccaggctgc ccacccccca ccaggccccg
600

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 720  
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 780  
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 840  
 gggacatcag gccctctggt cctgacagag gaggagaaga ggaccctgat tgctgagggc  
 900  
 tatcccatcc ccaccaaact cccctcacc aaatcagagg agaaggcctt gaagaaaatt  
 960  
 cggaggaaga tcaagaataa gatttctgct caggaaagta ggagaaagaa gaaagaatac  
 1020  
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 1080  
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 1200  
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 1260  
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 1320  
 caccaaaaa  
 1329

&lt;210&gt; 5468

&lt;211&gt; 363

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5468

Met	Asp	Ala	Val	Leu	Glu	Pro	Phe	Pro	Ala	Asp	Arg	Leu	Phe	Pro	Gly
1				5				10						15	
Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
			20					25					30		
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
		35					40					45			
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
	50				55						60				
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
65					70					75					80
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
				85					90					95	
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
			100					105					110		
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
		115					120					125			
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
	130					135					140				
Ser	Ala	Met	Ala	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly
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Leu	Ser	Pro	Leu	Ser	Arg	Leu	Pro	Ile	Pro	His	Gln	Ala	Pro	Gly	Glu

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<400> 5469
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180
gtgggtcaagg agaagctggc tacggaaggc tcctcaggag caacagagaa gatgaagaaa
240
gggttatctg acttcctagg ggtgatctca gacacctttg ccccttcgcc agacaaaacc
300
atcgactgcg atgtcatcac cctgatgggc acaccgtctg gcacagctga gccctatgat
360
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420
gatggggccc cggaattgtt tgacgcctgg ctttcccagt tctgcttggg ggagaagaag
480
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540
gttccagcag ctgtttccca ttcagaattc tggcatcggt atttctataa agtccatcag
600
ttagagcagg agcaggcccg gagggacgcc ctgaagcagc gggcggaaca gagcatctct
660
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 aaagaggcaa aggttcctgt ggccaaaatt tctacattcc ctgaaggaga acctggcccc  
 780  
 cagagcccct gtgaagagaa tctggtgact tcagttgagc ccccagcaga ggtgactcca  
 840  
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 1020  
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 1080  
 ctgagggagg aggcgcccac agacttacgg gtgtttgagc tgaactcgga tagtgggaag  
 1140  
 tctacaccct ccaacaatgg aaagaaaggc tcaagcacgg acatcagtga ggactgggag  
 1200  
 aaagactttg acttggacat gactgaagag gaggtgcaga tggcactttc caaagtggat  
 1260  
 gcctccgggg agctgaagat gtagaggggg aa  
 1292

&lt;210&gt; 5470

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5470

Xaa	Ala	Ala	Ala	Ser	Thr	Glu	Gly	Glu	Asp	Val	Gly	Trp	Trp	Arg	Ser
1				5					10					15	
Trp	Leu	Gln	Gln	Ser	Tyr	Gln	Ala	Val	Lys	Glu	Lys	Ser	Ser	Glu	Ala
			20					25					30		
Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
		35				40						45			
His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
	50					55					60				
Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
65				70					75					80	
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
			85					90					95		
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
		100						105					110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
		115					120					125			
Leu	Gln	Ser	Asp	Pro	Ala	Thr	Tyr	Cys	Asn	Glu	Pro	Asp	Gly	Pro	Pro
	130					135					140				
Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
145				150					155					160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
			165					170					175		
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
		180						185					190		
Arg	Tyr	Phe	Tyr	Lys	Val	His	Gln	Leu	Glu	Gln	Glu	Gln	Ala	Arg	Arg

195	200	205
Asp Ala Leu Lys Gln Arg	Ala Glu Gln Ser Ile Ser	Glu Glu Pro Gly
210	215	220
Trp Glu Glu Glu Glu Glu	Glu Leu Met Gly Ile Ser	Pro Ile Ser Pro
225	230	235
Lys Glu Ala Lys Val Pro	Val Ala Lys Ile Ser Thr	Phe Pro Glu Gly
245	250	255
Glu Pro Gly Pro Gln Ser	Pro Cys Glu Glu Asn Leu	Val Thr Ser Val
260	265	270
Glu Pro Pro Ala Glu Val	Thr Pro Ser Glu Ser Ser	Glu Ser Ile Ser
275	280	285
Leu Val Thr Gln Ile Ala	Asn Pro Ala Thr Ala Pro	Glu Ala Arg Val
290	295	300
Leu Pro Lys Asp Leu Ser	Gln Lys Leu Leu Glu Ala	Ser Leu Glu Glu
305	310	315
Gln Gly Leu Ala Val Asp	Val Gly Glu Thr Gly Pro	Ser Pro Pro Ile
325	330	335
His Ser Lys Pro Leu Thr	Pro Ala Gly His Thr Gly	Gly Pro Glu Pro
340	345	350
Arg Pro Pro Ala Arg Val	Glu Thr Leu Arg Glu Glu	Ala Pro Thr Asp
355	360	365
Leu Arg Val Phe Glu Leu	Asn Ser Asp Ser Gly Lys	Ser Thr Pro Ser
370	375	380
Asn Asn Gly Lys Lys Gly	Ser Ser Thr Asp Ile Ser	Glu Asp Trp Glu
385	390	395
Lys Asp Phe Asp Leu Asp	Met Thr Glu Glu Glu Val	Gln Met Ala Leu
405	410	415
Ser Lys Val Asp Ala Ser	Gly Glu Leu Lys Met	
420	425	

<210> 5471  
 <211> 534  
 <212> DNA  
 <213> Homo sapiens

<400> 5471  
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 120  
 ttgccaggtg tggcgcacat gtgtgccctg gggcagagta cagagacaca agcttgtgtg  
 180  
 gacacgaatg tgtagctatg tgcgagtgc caccgagtgg tgagtgcagg gaccccaggc  
 240  
 cggcctgcgt cgggtgcgcag ggcatatagg ggcgtgcacg cagtcttggg ggtgtgtgca  
 300  
 cagagcccc ggcacccgcg tgtgtgcaaa gacacaggaa cccgtctgcg tggcgtgtg  
 360  
 tgtgcaacct aaggaggtgg gcgcttggac tccaaagtgt gcgcttatcc ggatgtggat  
 420  
 gtgggggacag ccggggacag ggctgggtgt gcgtgactcg ggtgtgccgg gaccacaga  
 480  
 gcatatgtgt ccatgcctgg tgctgtgact catgtccctg ggggtgggac gcgt  
 534

<210> 5472  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 5472

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Met Leu Cys Gly Ser Arg His Thr Arg Val Thr His Thr Gln Pro Cys
 1           5           10           15
Pro Arg Leu Pro Pro His Pro His Pro Asp Lys Arg Thr Leu Trp Ser
      20           25           30
Pro Ser Ala His Leu Leu Gly Leu His Thr Gln Arg His Ala Asp Gly
      35           40           45
Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr
      50           55           60
Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln
65           70           75           80
Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile
      85           90           95
Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His
      100          105          110
Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys
      115          120          125
Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser
      130          135          140
Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala
145          150          155          160
Ala
  
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<210> 5473  
 <211> 691  
 <212> DNA  
 <213> Homo sapiens

<400> 5473

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gcgaccagca gcgctggtgg ccatgctctt ggacactacg gcctggcggg cagccctcgc
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cgctgccgcg ccccgcgccc ccaggaggcc gcaccctgcg ccaggggccc gagacagcaa
120
catcttcttg ggctgcagg agacctgaca gatgccaaaa caaaggaaca gttgggatcc
180
aggcagcatg aggtagaatg gcaaacctac cagggtattc tgaagaagac aagagtcatg
240
gaaaaaacca agtggctgga tatcaaagga aatcatgaaa aagatggagg agctcttatt
300
actggccaag gaaagcagtc ggagcaacca tacaatttgg tttggacact ttacaacatc
360
cactattctt tctccatcac caggaatccg gtcaataatg agttcggcta tagcttattt
420
gtgtggacat ctccatacac ttggtggact gatgcctgtt ttgcacactc gtcacttcca
480
gggcactttg gaacttgagg tgggagactg gaaggataat aggaggtacc ggatttttgc
540
  
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 600  
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 660  
 tcttcactca acccacatta gattggtaac a  
 691

<210> 5474  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 5474  
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 Ser Asn His Thr Ile Trp Phe Gly His Phe Thr Thr Ser Thr Ile Leu  
 20 25 30  
 Ser Pro Ser Pro Gly Ile Arg Ser Ile Met Ser Ser Ala Ile Ala Tyr  
 35 40 45  
 Leu Cys Gly His Leu His Thr Leu Gly Gly Leu Met Pro Val Leu His  
 50 55 60  
 Thr Arg His Phe Gln Gly Thr Leu Glu Leu Glu Val Gly Asp Trp Lys  
 65 70 75 80  
 Asp Asn Arg Arg Tyr Arg Ile Phe Ala Phe Asp His Asp Leu Phe Ser  
 85 90 95  
 Phe Ala Asp Leu Ile Phe Gly Lys Trp Pro Val Val Leu Ile Thr Asn  
 100 105 110  
 Pro Lys Ser Leu Leu Tyr Ser Cys Gly Glu His Glu Pro Leu Glu Arg  
 115 120 125  
 Leu Leu His Ser Thr His Ile Arg Leu Val Thr  
 130 135

<210> 5475  
 <211> 628  
 <212> DNA  
 <213> Homo sapiens

<400> 5475  
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 120  
 aacaaccccc acgccagcta cagcgccctt ccgccagtga gctcctccga cagcgaggcc  
 180  
 cccgaggcca accccgccga cggcagtgac gctgacgagg acgatgagga cgggggggtc  
 240  
 atggccgtca cagcggtaac cgccacagct gccagcgaca ggatggagag cgactcagac  
 300  
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 360  
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 420  
 gaagaggaga actcggaaaag ctcatctgag tcggagaaga ccagcgacca ggacttcaca  
 480

cctgagaaga aagcagcggc cccggcgcca cggagggggcc ctctgggggg acggaaaaaa  
 540  
 aagaaggcgc cgtcagcctc cgactccgac tccaaggccg attcggacgg ggccaagcct  
 600  
 gagccggtgg ccatggcgcg gtcggcgt  
 628

<210> 5476  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 5476  
 Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro Tyr  
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 Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe  
                   20                  25                  30  
 Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser  
                   35                  40                  45  
 Ala Pro Pro Pro Val Ser Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn  
                   50                  55                  60  
 Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val  
 65                  70                  75                  80  
 Met Ala Val Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu  
                   85                  90                  95  
 Ser Asp Ser Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg  
                   100                  105                  110  
 Lys Thr Pro Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala  
                   115                  120                  125  
 Ser Ser Asp Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn  
                   130                  135                  140  
 Ser Glu Ser Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr  
 145                  150                  155                  160  
 Pro Glu Lys Lys Ala Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly  
                   165                  170                  175  
 Gly Arg Lys Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys  
                   180                  185                  190  
 Ala Asp Ser Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser  
                   195                  200                  205  
 Ala

<210> 5477  
 <211> 727  
 <212> DNA  
 <213> Homo sapiens

<400> 5477  
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 120  
 gggcccttct cactgagctc gtgaagtgcc tcagtcaagg caaggtcccc tgggccatat  
 180

gggccccccc gcccatgggg ttgggctggt ccttatagtg cctacgtag tctgtgtgga  
 240  
 gcccttgccc agcgggggag aaaaagggtg cttctgggtcc gtctgtataa aacatggccc  
 300  
 ctcacctgtc ggccccccac acagctggca ggctgggctg gcctctcacc cctggcctcc  
 360  
 cctggacccc tggtctggctc ctcaacttca ctctccgcac ttagtgcccg gccgccccca  
 420  
 gactcatcgt cgctcagccc atagggaagc ccaggcctgg ccccagaga gtctccttcc  
 480  
 gagtctctct cgaagcccat gagctgggtca ctgttgccgt cgccttcctc ctcttctct  
 540  
 tcctcctcaa actccagatc ctggcctagt agcaaatac tctccaatac caggggccccg  
 600  
 ggtccttcgt cgagggagtc ttcagtatcc actttgaccc cctcgcatct caccgggctgc  
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 720  
 gcggccg  
 727

<210> 5478  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 5478  
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 20 25 30  
 Ala Pro Gly Gln Arg Gly Arg Lys Arg Trp Leu Leu Val Arg Leu Tyr  
 35 40 45  
 Lys Thr Trp Pro Leu Thr Cys Arg Pro Pro Thr Gln Leu Ala Gly Trp  
 50 55 60  
 Ala Gly Leu Ser Pro Leu Ala Ser Pro Gly Pro Leu Ala Gly Ser Ser  
 65 70 75 80  
 Thr Ser Leu Ser Ala Leu Ser Ala Arg Pro Pro Pro Asp Ser Ser Ser  
 85 90 95  
 Leu Ser Pro

<210> 5479  
 <211> 1386  
 <212> DNA  
 <213> Homo sapiens

<400> 5479  
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 120  
 atgcgagagg agcagctggc acgggaggcc gaggccccgg cggagcggga ggcggaggcc  
 180

cggaggcggg aggagcagga ggcacgagag aaggcgcagg ccgagcagga ggagcaggag  
 240  
 cggctgcaga agcagaaaga ggaggccgaa gctcggtcgc gggaagaggc ggagcggcag  
 300  
 cgtctggagc gggaaaagca cttccagcag caggagcaag agcggcaaga gcgcagaaaag  
 360  
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 600  
 ctcccagcac accaggagaa tggtcttctcc accaacggac cctctgggga caagagtctg  
 660  
 agccgaacac cagagacact cctgcccttt gcagaggcag aagccttctt caagaaagct  
 720  
 gtggtgcagt ccccgaggt cacagaagtc ctttaagagg gtttgcccttg gatccgggca  
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 1140  
 gcagaccctc cccccaagc cccctgggga gatcttcctc tctctattta actgtaactg  
 1200  
 agggggatcc caggtctggg gatgggggac accttgggac acaggatact ggttgcttca  
 1260  
 ggggtaccca tgccccctgc cctcgcttgg aatcagtgtt actgcatctg attaaatgtc  
 1320  
 tccagaaata aagaataatt ctgccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1380  
 aaaaaa  
 1386

&lt;210&gt; 5480

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5480

Ala	Gly	Thr	Thr	Asp	Arg	Glu	Glu	Ala	Thr	Arg	Leu	Leu	Ala	Glu	Lys
1				5				10						15	
Arg	Arg	Gln	Ala	Arg	Glu	Gln	Arg	Glu	Arg	Glu	Gln	Glu	Gln	Arg	Arg
		20					25					30			
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

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<211> 188

<212> PRT

<213> Homo sapiens

<400> 5482

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			20					25					30		
Leu	Arg	Asn	Pro	Ser	Ala	Ala	Phe	Cys	Val	Ala	Arg	Leu	Gln	Asp	
		35					40				45				
Phe	Lys	Leu	Asp	Phe	Gly	Asn	Ser	Gln	Gly	Lys	Thr	Ser	Gln	Thr	Trp
	50					55				60					
His	Gly	Gly	Ile	Ala	Thr	Ile	Phe	Gln	Ser	Pro	Gly	Asp	Glu	Leu	Trp
65					70				75					80	
Gly	Val	Val	Trp	Lys	Met	Asn	Lys	Ser	Asn	Leu	Asn	Ser	Leu	Asp	Glu
				85					90					95	
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
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<212> DNA
<213> Homo sapiens
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 <211> 357  
 <212> PRT  
 <213> Homo sapiens

<400> 5484  
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 35 40 45  
 Glu Leu Arg Gly Gly Phe Asp Trp Ser Leu His Phe Gln Trp Glu Gln  
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 Leu Ser Pro Glu Gln Lys Ala Arg Arg Leu Asp Pro Thr Glu Pro Ile  
 65 70 75 80  
 Arg Thr Pro Ile Ile Ala Gly Gly Leu Phe Val Ile Asp Lys Ala Trp  
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 Phe Asp Tyr Leu Gly Lys Tyr Asp Met Asp Met Asp Ile Trp Gly Gly  
 100 105 110  
 Glu Asn Phe Glu Ile Ser Phe Arg Val Trp Met Cys Gly Gly Ser Leu  
 115 120 125  
 Glu Ile Val Pro Cys Ser Arg Val Gly His Val Phe Arg Lys Lys His  
 130 135 140  
 Pro Tyr Val Phe Pro Asp Gly Asn Ala Asn Thr Tyr Ile Lys Asn Thr  
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 Lys Arg Thr Ala Glu Val Trp Met Asp Glu Tyr Lys Gln Tyr Tyr Tyr  
 165 170 175  
 Ala Ala Arg Pro Phe Ala Leu Glu Arg Pro Phe Gly Asn Val Glu Ser  
 180 185 190  
 Arg Leu Asp Leu Arg Lys Asn Leu Arg Cys Gln Ser Phe Lys Trp Tyr  
 195 200 205  
 Leu Glu Asn Ile Tyr Pro Glu Leu Ser Ile Pro Lys Glu Phe Ser Ile  
 210 215 220  
 Gln Lys Gly Asn Ile Arg Gln Arg Gln Lys Cys Leu Glu Ser Gln Arg  
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 Val Lys Gly Glu Asp Ala Lys Ser Gln Val Trp Ala Phe Thr Tyr Thr



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720
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840
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1020

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<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

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		20						25					30		
Arg	Ser	Arg	Ser	Arg	Ser	Phe	Ser	Arg	Ser	Ser	Arg	Ser	His	Ser	Arg
		35					40					45			
Val	Ser	Ser	Arg	Phe	Ser	Ser	Arg	Ser	Arg	Arg	Ser	Lys	Ser	Arg	Ser
	50					55					60				
Arg	Ser	Arg	Arg	Arg	His	Gln	Arg	Lys	Tyr	Arg	Arg	Tyr	Ser	Arg	Ser
65					70				75					80	
Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
			85					90						95	
Arg	Tyr	Gly	Phe	Thr	Arg	Arg	Tyr	Tyr	Arg	Ser	Pro	Ser	Arg	Tyr	Arg
			100					105					110		
Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Ser	Tyr	Cys	Gly
	115					120						125			
Arg	Ala	Tyr	Ala	Ile	Ala	Arg	Gly	Gln	Arg	Tyr	Tyr	Gly	Phe	Gly	Arg
130						135						140			
Thr	Val	Tyr	Pro	Glu	Glu	His	Ser	Arg	Trp	Arg	Asp	Arg	Ser	Arg	Thr
145					150					155				160	
Arg	Ser	Arg	Ser	Arg	Thr	Pro	Phe	Arg	Leu	Ser	Glu	Lys	Asp	Arg	Met
				165				170						175	
Glu	Leu	Leu	Glu	Ile	Ala	Lys	Thr	Asn	Ala	Ala	Lys	Ala	Leu	Gly	Thr
			180					185					190		
Thr	Asn	Ile	Asp	Leu	Pro	Ala	Ser	Leu	Arg	Thr	Val	Pro	Ser	Ala	Lys
	195						200						205		
Glu	Thr	Ser	Arg	Gly	Ile	Gly	Val	Ser	Ser	Asn	Gly	Ala	Lys	Pro	Glu
210						215					220				
Leu	Ser	Glu	Lys	Val	Thr	Glu	Asp	Gly	Thr	Arg	Asn	Pro	Asn	Glu	Lys

225	230								235					240		
Pro	Thr	Gln	Gln	Arg	Ser	Ile	Ala	Phe	Ser	Ser	Asn	Asn	Ser	Val	Ala	
				245		250				255						
Lys	Pro	Ile	Gln	Lys	Ser	Ala	Lys	Ala	Ala	Thr	Glu	Glu	Ala	Ser	Ser	
			260		265				270							
Arg	Ser	Pro	Lys	Ile	Asp	Gln	Lys	Lys	Ser	Pro	Tyr	Gly	Leu	Trp	Ile	
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Pro	Ile															
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<210> 5487
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<212> DNA
<213> Homo sapiens
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<210> 5488

<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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Gln	Tyr	Thr	Ser	Ile	Tyr	Gly	Ala	Leu	Lys	Lys	Ile	Met	Arg	Thr	Glu
			20					25					30		
Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met	Gly	Ala
		35					40					45			
Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met	Lys	Arg
	50				55						60				
Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu	Ala	Asn
65					70					75					80
Gly	Ile	Ala	Gly	Ser	Met	Ala	Thr	Leu	Leu	His	Asp	Ala	Val	Met	Asn
				85					90					95	
Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu	Gln	Met	Tyr	Asn	Ser	Gln	His
			100					105					110		
Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr	Val	Trp	Arg	Thr	Glu	Gly	Leu
	115					120						125			
Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr	Gln	Leu	Thr	Met	Asn	Ile	Pro
	130					135						140			
Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr	Glu	Phe	Leu	Gln	Glu	Gln	Val
145					150					155					160
Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln	Ser	His	Ile	Ile	Ser	Gly	Gly
				165					170					175	
Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val	Cys
			180					185					190		
Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Asn	Val	Ala	Leu	Ser	Leu	Ala	Asn
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Ile	Ser	Gly	Arg	Leu	Ser	Gly	Met	Ala	Asn	Ala	Phe	Arg	Thr	Val	Tyr

210	215	220
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Ile Tyr Gln Met Pro Ser Thr Ala Ile Ser Trp Ser Val Tyr Glu Phe		240
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 <211> 1600  
 <212> DNA  
 <213> Homo sapiens

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<210> 5490

<211> 357

<212> PRT

<213> Homo sapiens

<400> 5490

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Leu	Glu	Lys	Ile	Leu	Gln	Arg	Gln	Phe	Ser	Ser	Ser	Asn	Ser	Pro	Arg	35	40	45	
Gly	Ile	Ile	Phe	Thr	Arg	Thr	Arg	Gln	Ser	Ala	His	Ser	Leu	Leu	Leu	50	55	60	
Trp	Leu	Gln	Gln	Gln	Gln	Gly	Leu	Gln	Thr	Val	Asp	Ile	Arg	Ala	Gln	65	70	75	80
Leu	Leu	Ile	Gly	Ala	Gly	Asn	Ser	Ser	Gln	Ser	Thr	His	Met	Thr	Gln	85	90	95	
Arg	Asp	Gln	Gln	Glu	Val	Ile	Gln	Lys	Phe	Gln	Asp	Gly	Thr	Leu	Asn	100	105	110	
Leu	Leu	Val	Ala	Thr	Ser	Val	Ala	Glu	Glu	Gly	Leu	Asp	Ile	Pro	His	115	120	125	
Cys	Asn	Val	Val	Val	Arg	Tyr	Gly	Leu	Leu	Thr	Asn	Glu	Ile	Ser	Met	130	135	140	
Val	Gln	Ala	Arg	Gly	Arg	Ala	Arg	Ala	Asp	Gln	Ser	Val	Tyr	Ala	Phe	145	150	155	160
Val	Ala	Thr	Glu	Gly	Ser	Arg	Glu	Leu	Lys	Arg	Glu	Leu	Ile	Asn	Glu	165	170	175	
Ala	Leu	Glu	Thr	Leu	Met	Glu	Gln	Ala	Val	Ala	Ala	Val	Gln	Lys	Met	180	185	190	
Asp	Gln	Ala	Glu	Tyr	Gln	Ala	Lys	Ile	Arg	Asp	Leu	Gln	Gln	Ala	Ala	195	200	205	
Leu	Thr	Lys	Arg	Ala	Ala	Gln	Ala	Ala	Gln	Arg	Glu	Asn	Gln	Arg	Gln	210	215	220	
Gln	Phe	Pro	Val	Glu	His	Val	Gln	Leu	Leu	Cys	Ile	Asn	Cys	Met	Val	225	230	235	240
Ala	Val	Gly	His	Gly	Ser	Asp	Leu	Arg	Lys	Val	Glu	Gly	Thr	His	His	245	250	255	
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<211> 5555
<212> DNA
<213> Homo sapiens
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<211> 1278

<212> PRT

<213> Homo sapiens

<400> 5494

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5495

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&lt;210&gt; 5496

&lt;211&gt; 345

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5496

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 1918

&lt;210&gt; 5500

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5500

Met	Ser	Pro	Ala	Phe	Arg	Ala	Met	Asp	Val	Glu	Pro	Arg	Ala	Lys	Gly
1				5				10					15		
Val	Leu	Leu	Glu	Pro	Phe	Val	His	Gln	Val	Gly	Gly	His	Ser	Cys	Val



20							25					30			
Leu	Arg	Phe	Asn	Glu	Thr	Thr	Leu	Cys	Lys	Pro	Leu	Val	Pro	Arg	Glu
		35						40				45			
His	Gln	Phe	Tyr	Glu	Thr	Leu	Pro	Ala	Glu	Met	Arg	Lys	Phe	Thr	Pro
	50					55					60				
Gln	Tyr	Lys	Gly	Val	Val	Ser	Val	Arg	Phe	Glu	Glu	Asp	Glu	Asp	Arg
65					70					75					80
Asn	Leu	Cys	Leu	Ile	Ala	Tyr	Pro	Leu	Lys	Gly	Asp	His	Gly	Ile	Val
				85					90					95	
Asp	Ile	Ala	His	Asn	Ser	Asp	Cys	Glu	Pro	Lys	Ser	Lys	Leu	Leu	Arg
			100					105					110		
Trp	Thr	Thr	Asn	Lys	Lys	His	His	Val	Leu	Glu	Thr	Glu	Lys	Thr	Pro
		115						120				125			
Lys	Asp	Trp	Val	Arg	Gln	His	Arg	Lys	Glu	Glu	Lys	Met	Lys	Ser	His
	130					135					140				
Lys	Leu	Glu	Glu	Glu	Phe	Glu	Trp	Leu	Lys	Lys	Ser	Glu	Val	Leu	Tyr
145					150					155					160
Tyr	Thr	Val	Glu	Lys	Lys	Gly	Asn	Ile	Ser	Ser	Gln	Leu	Lys	His	Tyr
				165					170					175	
Asn	Pro	Trp	Ser	Met	Lys	Cys	His	Gln	Gln	Gln	Leu	Gln	Arg	Met	Lys
			180					185					190		
Glu	Asn	Ala	Lys	His	Arg	Asn	Gln	Tyr	Lys	Phe	Ile	Leu	Leu	Glu	Asn
		195						200				205			
Leu	Thr	Ser	Arg	Tyr	Glu	Val	Pro	Cys	Val	Leu	Asp	Leu	Lys	Met	Gly
	210					215					220				
Thr	Arg	Gln	His	Gly	Asp	Asp	Ala	Ser	Glu	Glu	Lys	Ala	Ala	Asn	Gln
225					230					235					240
Ile	Arg	Lys	Cys	Gln	Gln	Ser	Thr	Ser	Ala	Val	Ile	Gly	Val	Xaa	Val
				245					250					255	
Cys	Gly	Met	Gln	Val	Tyr	Gln	Ala	Gly	Ser	Gly	Gln	Leu	Met	Phe	Met
			260					265					270		
Asn	Lys	Tyr	His	Gly	Arg	Lys	Leu	Ser	Val	Gln	Gly	Phe	Lys	Glu	Ala
		275						280				285			
Leu	Phe	Gln	Phe	Phe	His	Asn	Gly	Arg	Tyr	Leu	Arg	Arg	Glu	Leu	Leu
	290					295					300				
Gly	Pro	Val	Leu	Lys	Lys	Leu	Thr	Glu	Leu	Lys	Ala	Val	Leu	Glu	Arg
305					310					315					320
Gln	Glu	Ser	Tyr	Arg	Phe	Tyr	Ser	Ser	Ser	Leu	Leu	Val	Ile	Tyr	Asp
				325					330					335	
Gly	Lys	Glu	Arg	Pro	Glu	Val	Val	Leu	Asp	Ser	Asp	Ala	Glu	Asp	Leu
			340					345					350		
Glu	Asp	Leu	Ser	Glu	Glu	Ser	Ala	Asp	Glu	Ser	Ala	Gly	Ala	Tyr	Ala
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<210> 5501

<211> 568

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5501

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 240  
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 420  
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 568

&lt;210&gt; 5502

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5502

Met	Ile	Leu	Gly	Lys	Arg	Leu	His	Leu	Asn	Phe	Arg	Tyr	Phe	Thr	Cys
1				5					10					15	
Glu	Ala	Gly	Thr	Lys	Pro	Cys	Ser	Ser	Glu	Val	Pro	Val	Gly	Ala	Gly
			20					25					30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
			35				40					45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
	50					55					60				
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65					70					75					80
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
			85						90					95	
Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
			100					105					110		

&lt;210&gt; 5503

&lt;211&gt; 1679

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5503

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120  
atttaatcct cacaatagtc aagctaggaa ggtaagtgtg gaattattac cccatttgat  
180  
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240  
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360  
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420  
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600  
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720  
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780  
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1679

<210> 5504  
 <211> 392  
 <212> PRT  
 <213> Homo sapiens

<400> 5504

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      20           25           30
Leu Pro Pro Ser Cys Thr Ile Ser Gly Glu Lys Lys Pro Pro Ala Val
      35           40           45
Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
      50           55           60
Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
      65           70           75           80
Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
      85           90           95
Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
      100          105          110
Ala Met Gly Leu Ala Pro Thr Ser Pro Gly Ala Pro Asn Ser Ala
      115          120          125
Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
      130          135          140
His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
      145          150          155          160
Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
      165          170          175
Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
      180          185          190
Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
      195          200          205
Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
      210          215          220
Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
      225          230          235          240
Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
      245          250          255
Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
      260          265          270
Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
      275          280          285
Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
      290          295          300
Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
      305          310          315          320
Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
      325          330          335
Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
      340          345          350
Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
      355          360          365
Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

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370 375 380  
 Pro Cys Gly Ser Trp Gly Thr Arg  
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<210> 5505  
 <211> 1099  
 <212> DNA  
 <213> Homo sapiens

<400> 5505  
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 240  
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 1099

<210> 5506  
 <211> 280  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 5506

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 20 25 30  
 Glu Leu Pro Glu Asn Ile Leu Leu Glu Leu Phe Thr His Val Pro Ala  
 35 40 45  
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp  
 50 55 60  
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly  
 65 70 75 80  
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe  
 85 90 95  
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala  
 100 105 110  
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu  
 115 120 125  
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn  
 130 135 140  
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys  
 145 150 155 160  
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu  
 165 170 175  
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg  
 180 185 190  
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala  
 195 200 205  
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln  
 210 215 220  
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn  
 225 230 235 240  
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp  
 245 250 255  
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser  
 260 265 270  
 Ile Thr Ile Gly Pro Pro Leu Pro  
 275 280

&lt;210&gt; 5507

&lt;211&gt; 1658

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5507

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 aagcaatttc tcacctttga caaacaggtc cttcgattct atgcaatctg ggatgatata  
 180  
 gacagcatgt atggtgaatg tcggacctac atcattcatt actatcttat ggatgatata  
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aaccgccagc gtgtgccc aa agtttttggtg gaaaatgcaa agaacttccc tcagtgtgtg  
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ctagaaatct ctgaccaaga agtggttgaa tggatatactg ctaaagactt cattgttggg  
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480  
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gaaccacctc cagtaaaaca ggagttgcct ccttataacg gttttggact agtggaagat  
600  
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660  
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720  
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aaaaaataaa tttttttgga gatgggaaaa aaaaaaaaaa  
1658

&lt;210&gt; 5508

&lt;211&gt; 448

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5508

Xaa Leu Glu Ser Gln Gly Ile Glu Leu Asn Pro Pro Glu Lys Met Ala

1	5	10	15
Leu Asp Pro Tyr Thr Glu Leu Arg Lys Gln Pro Leu Arg Lys Tyr Val			
20	25	30	
Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
35	40	45	
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
50	55	60	
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
65	70	75	80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
100	105	110	
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
115	120	125	
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
130	135	140	
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
145	150	155	160
Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
165	170	175	
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
210	215	220	
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
225	230	235	240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
245	250	255	
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
260	265	270	
Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
305	310	315	320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
325	330	335	
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
340	345	350	
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys			
370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
385	390	395	400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
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Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe Ser Asn			



435

440

445

<210> 5509  
 <211> 818  
 <212> DNA  
 <213> Homo sapiens

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 120  
 ctatgtgaga ggaagtaagt atacacagcg taagaggtgt gataaccaag tcatagaaga  
 180  
 aatgttttga gaacatggaa tcatgtgaac ttattatgtg gtaagtacag ataccagggg  
 240  
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 300  
 atgtggcttt caacttcacc ctacaggaaa ggtagtcaat gtggagaagc cttcagccag  
 360  
 attccaggtc ataattctgaa taagaaaacg cctcctggag taaagccacc tgaaagccat  
 420  
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 480  
 ggacgcaaac cctgtgaata tcaggaatgt agacagaagg catatacatg taagccatgt  
 540  
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 aacctctatg aatgttagga atttcagaaa acattcactt ccccccaaa ccttcaaaga  
 660  
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 720  
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 780  
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 818

<210> 5510  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 5510  
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 Gly Val Lys Pro Pro Glu Ser His Val Cys Gly Glu Val Gly Val Gly  
 35 40 45  
 Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro  
 50 55 60  
 Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys  
 65 70 75 80  
 Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro

95

<400> 5513  
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120  
agactcgggg agccattgac catcgtctct gaggatggag actggtggac ggtgctgtct  
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240  
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300  
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360  
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720  
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780  
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837

&lt;210&gt; 5514

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5514

Xaa	Ser	Leu	Ser	Ser	Ser	Val	Gln	Gly	Gln	Gly	Pro	Val	Thr	Met	Glu
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Ala	Glu	Arg	Ser	Lys	Ala	Thr	Ala	Ala	Ala	Leu	Gly	Ser	Phe	Pro	Ala
			20					25					30		
Gly	Gly	Pro	Ala	Glu	Leu	Ser	Leu	Arg	Leu	Gly	Glu	Pro	Leu	Thr	Ile
		35					40					45			
Val	Ser	Glu	Asp	Gly	Asp	Trp	Trp	Thr	Val	Leu	Ser	Glu	Val	Ser	Gly
	50				55					60					
Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
65				70					75					80	
Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
			85					90					95		
Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
		100					105					110			
Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
	115					120				125					
Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
	130				135				140						
Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145				150				155					160		
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

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                165                170                175
Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
                180                185                190
Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
                195                200                205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
                210                215                220
Ser Glu Gly Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp
225                230                235                240
Glu Ala Val Ser Leu Asp Asp Ala
                245

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<210> 5515  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens

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120
aagcttcagc tacaagccct tgagcaagag cacaagaagc tggctgcccc ccttgaggaa
180
gagcgtggca agaacaagca ggtggctctg atgctgggtca aagagtgcaa gcagctctca
240
agcaaagtca tagaggagge ccagaagctc gaagacgtaa tggccaaact ggcttcttct
300
ctttgtcacc agcacctgct tcatagtctc tctggagtgc caggaacggg tcatatagat
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420

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<210> 5516  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

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<400> 5516
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Lys Lys Met Gln Glu Arg Met Ser Ala Gln Leu Ala Ala Glu Ser
20     25     30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Ala Leu Glu
35     40     45
Gln Glu His Lys Lys Leu Ala Arg Leu Glu Glu Arg Gly Lys
50     55     60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65     70     75     80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85     90     95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
100    105    110
Val Pro Gly Thr Gly His Ile Asp

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115

120

<210> 5517  
 <211> 804  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
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 240  
 agtgattggt ttaagtgaag accatgggtg agatcatttg tctttggtct aatagaattt  
 300  
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 360  
 ggtagagcat gaatgcagc atattatacc atcaagatgt tcttagagca gtgtatggat  
 420  
 ggatcgattg tactgccatc agttgtgact gacgttggtat tcaaggagaa agagaaactt  
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 660  
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 720  
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 780  
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 804

<210> 5518  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 5518  
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 20 25 30  
 Ile Val Val Gly Ser Ser Asp Arg Ile Arg Ala Ser Ser Leu Gln Val  
 35 40 45  
 Gln Lys Gln Phe Lys Thr Leu Met Ile Ala Leu Gln Gln Pro Thr His  
 50 55 60  
 Gly Asp Met Val Ile Val Pro Thr Cys Cys Ser Val Ile Cys Arg Ala  
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 Ser Asp Trp Phe Lys

85

<210> 5519  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 5519  
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 120  
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 180  
 aaaacaaaca cacacagaag ttggcgctgg gcaccacatt ctctcttga cctaaccatc  
 240  
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 300  
 cacatgctaa gagccaagca gatggaacag aagctcccc aagctgctgg ctcccactat  
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 401

<210> 5520  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 5520  
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 20 25 30  
 Gln Arg Gln Leu Leu Cys Val Phe Val Phe Arg Asp Ser Leu Arg Glu  
 35 40 45  
 Gly Asn Ala Arg Arg Asn Met Val Ser Ser Glu Ala His Gly Cys Phe  
 50 55 60  
 Leu Arg Pro Ala Val Phe Tyr Ala Thr Tyr Pro Cys Thr Ser Tyr Ala  
 65 70 75 80  
 Lys Glu Thr Lys Pro Ser Ala Cys Leu Phe Pro Leu Leu Ile Ile Gly  
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 Lys Trp Met Leu Trp  
 100

<210> 5521  
 <211> 2524  
 <212> DNA  
 <213> Homo sapiens

<400> 5521  
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 120

acagacgcat cgtttctttt ttaatactcc ctaagaaagg gaataacctt caagctggcg  
180  
ggagcaatgg ttcacataaa gaaaggcgag ctgacccagg aggagaagga gctactggaa  
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300  
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960  
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 1920  
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 1980  
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 2040  
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 aaaa  
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<210> 5522

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5522

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			20					25					30		
Ser	Ser	Lys	Asn	Val	Arg	Val	Asn	Cys	Leu	Asp	Glu	Asn	Gly	Met	Thr
		35					40					45			
Pro	Leu	Met	His	Ala	Ala	Tyr	Lys	Gly	Lys	Leu	Asp	Met	Cys	Lys	Leu
	50					55					60				
Leu	Leu	Arg	His	Gly	Ala	Asp	Val	Asn	Cys	His	Gln	His	Glu	His	Gly
65				70					75					80	
Tyr	Thr	Ala	Leu	Met	Phe	Ala	Ala	Leu	Ser	Gly	Asn	Lys	Asp	Ile	Thr
			85					90						95	
Trp	Val	Met	Leu	Glu	Ala	Gly	Ala	Glu	Thr	Asp	Val	Val	Asn	Ser	Val
			100					105					110		
Gly	Arg	Thr	Ala	Ala	Gln	Met	Ala	Ala	Phe	Val	Gly	Gln	His	Asp	Cys
			115			120					125				
Val	Thr	Ile	Ile	Asn	Asn	Phe	Phe	Pro	Arg	Glu	Arg	Leu	Asp	Tyr	Tyr
	130				135						140				
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<212> DNA
<213> Homo sapiens
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180
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240
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300
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agtgaacagc aagatcgaaa cagagtttct gaagaactta tcatggttgt ccaagaaatg  
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420  
gctctccgct gtgtccacag cgttcaagca aacagtgagt ttttccagat tctcagtcag  
480  
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1080  
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1140  
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1320  
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1860  
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1920

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1980  
gctccacaga tcctgtccac ggcgatgctg agcttggggg cgggcataag ccaatgcggt  
2040  
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2160  
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&lt;210&gt; 5524

&lt;211&gt; 1193

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5524

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Leu	Gln	Arg	Lys	Leu	Ala	Asp	Ser	Ser	His	Ser	Glu	Gln	Gln	Asp	Arg
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Ile Leu Ser Ser Pro Tyr Ser Ser Tyr Leu Gln Gln Glu Ser Arg Ser
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865                    870                    875                    880
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885                    890                    895
Lys Trp Glu Ala Gln Ser Glu Gly His Pro Phe Ile Thr Ser Arg Ser
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&lt;210&gt; 5525

&lt;211&gt; 761

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5525

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&lt;210&gt; 5526

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5526

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65					70					75					80
Met	Arg	Glu	Leu	Ala	Ile	Glu	His	His	Ser	Ser	Lys	Tyr	Ala	His	Trp
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&lt;210&gt; 5527

&lt;211&gt; 728

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5527

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<210> 5528

<211> 176

<212> PRT

<213> Homo sapiens

<400> 5528

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Val	Thr	Gly	Leu	Lys	Leu	Ser	Gln	Asp	Leu	Asp	Asp	Leu	Ala	Ile	Leu
		35					40					45			
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<211> 2602

<212> DNA

<213> Homo sapiens

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&lt;210&gt; 5530

&lt;211&gt; 603

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5530

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Glu	Gln	Pro	Ser	Gly	Ser	Val	Glu	Thr	Gly	Phe	Glu	Asp	Lys	Ile	Pro
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Lys	Arg	Arg	Phe	Ser	Glu	Met	Gln	Asn	Glu	Arg	Arg	Glu	Gln	Ala	Gln
			85					90						95	
Arg	Thr	Val	Leu	Ile	His	Cys	Pro	Glu	Lys	Ile	Ser	Glu	Asn	Lys	Phe
			100					105					110		
Leu	Lys	Tyr	Leu	Ser	Gln	Phe	Gly	Pro	Ile	Asn	Asn	His	Phe	Phe	Tyr
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Ile	Gly	Ser	Leu	Gln	Asn	Gly	Thr	His	Thr	Pro	Ser	Thr	Ala	Met	Glu

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Gln	Thr	Ser	Glu	Arg	Ser	Arg	Val	Arg	Ser	Ser	Asn	Gln	Leu	Pro	Arg	
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Thr	Phe	Gly	Lys	Leu	Gly	Cys	Asp	Leu	Asp	Met	Phe	Leu	Asp	Leu	Asp	
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Ser	His	Gln	Ala	Ser	Gly	Phe	Gln	Cys	Asp	Leu	Thr	Thr	Asn	Asn	Arg	
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Ser	Arg	Val	Arg	Ala	Leu	Val	Phe	Ser	Val	Arg	Cys	Trp	Ala	Arg	Ala	
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Ser	Phe	Thr	Lys	Lys	Lys	Ser	Asn	Lys	Phe	Ala	Ile	Glu	Thr	Val	Lys	
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Asn	Leu	Leu	Glu	Ser	Leu	Lys	Gly	Asn	Arg	Thr	Glu	Asn	Phe	Thr	Lys	

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 <213> Homo sapiens

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<211> 593

<212> PRT

<213> Homo sapiens

<400> 5532

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Pro	His	Pro	Gln	Arg	Gly	Cys	Glu	Val	Phe	Val	Gly	Lys	Ile	Pro	Arg
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Asp	Val	Tyr	Glu	Asp	Glu	Leu	Val	Pro	Val	Phe	Glu	Ala	Val	Gly	Arg
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Ile	Tyr	Glu	Leu	Arg	Leu	Met	Met	Asp	Phe	Asp	Gly	Lys	Asn	Arg	Gly
		100						105					110		
Tyr	Ala	Phe	Val	Met	Tyr	Cys	His	Lys	His	Glu	Ala	Lys	Arg	Ala	Val
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Arg	Glu	Leu	Asn	Asn	Tyr	Glu	Ile	Arg	Pro	Gly	Arg	Leu	Leu	Gly	Val
	130					135					140				
Cys	Cys	Ser	Val	Asp	Asn	Cys	Arg	Leu	Phe	Ile	Gly	Gly	Ile	Pro	Lys
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Gly	Val	Leu	Asp	Val	Ile	Val	Tyr	Ala	Ser	Ala	Ala	Asp	Lys	Met	Lys
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Asn	Arg	Gly	Phe	Ala	Phe	Val	Glu	Tyr	Glu	Ser	His	Arg	Ala	Ala	Ala
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Gln	Ile	Ala	Val	Asp	Trp	Ala	Glu	Pro	Glu	Ile	Asp	Val	Asp	Glu	Asp
225				230						235				240	
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			245						250					255	
Thr	Thr	Glu	Asp	Thr	Ile	Lys	Lys	Ser	Phe	Gly	Gln	Phe	Asn	Pro	Gly
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Cys	Val	Glu	Arg	Val	Lys	Lys	Ile	Arg	Asp	Tyr	Ala	Phe	Val	His	Phe
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Thr	Ser	Arg	Glu	Asp	Ala	Val	His	Ala	Met	Asn	Asn	Leu	Asn	Gly	Thr
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Glu	Leu	Glu	Gly	Ser	Cys	Leu	Glu	Val	Thr	Leu	Ala	Lys	Pro	Val	Asp
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Lys	Glu	Gln	Tyr	Ser	Arg	Tyr	Gln	Lys	Ala	Ala	Arg	Gly	Gly	Gly	Ala
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<210> 5534  
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 <213> Homo sapiens

<400> 5534  
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 35 40 45  
 Leu Ala Ser Leu Ser Ala Glu Glu Leu Lys Glu Leu Glu Arg Glu Leu  
 50 55 60  
 Glu Asp Ile Glu Pro Asp Arg Asn Leu Pro Val Gly Leu Arg Gln Lys  
 65 70 75 80  
 Ser Leu Thr Glu Lys Thr Pro Thr Gly Thr Phe Ser Arg Glu Ala Leu  
 85 90 95  
 Met Ala Tyr Trp Glu Lys Glu Ser Gln Lys Leu Leu Glu Lys Glu Arg  
 100 105 110  
 Leu Gly Glu Cys Gly Lys Val Ala Glu Asp Lys Glu Glu Ser Glu Glu  
 115 120 125  
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&lt;210&gt; 5536

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5536

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Tyr Tyr Gln Thr Phe Phe Asp Val Asp Thr Tyr Gln Val Phe Asp Arg
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&lt;210&gt; 5537

&lt;211&gt; 2881

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5537

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&lt;210&gt; 5538

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5538

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	130	135
Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu Asp		140
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Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn		160
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Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser		175
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&lt;210&gt; 5539

&lt;211&gt; 1887

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5539

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 <212> PRT  
 <213> Homo sapiens

<400> 5540  
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375

&lt;210&gt; 5541

&lt;211&gt; 1854

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5541

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<211> 315

<212> PRT

<213> Homo sapiens

<400> 5542

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&lt;210&gt; 5543

&lt;211&gt; 4021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5543

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&lt;210&gt; 5544

&lt;211&gt; 1141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5544

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 Gly Lys Val Leu Ile Val Asp Trp Asp Ile His His Gly Asn Gly Thr



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&lt;210&gt; 5545

&lt;211&gt; 1932

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5545

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&lt;210&gt; 5546

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 <212> PRT  
 <213> Homo sapiens

<400> 5546

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Lys	Leu	Ala	Arg	Gln	His	Pro	Glu	Ala	Phe	Ser	His	Ile	Pro	Glu	Ala
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<210> 5547  
 <211> 1391  
 <212> DNA  
 <213> Homo sapiens

<400> 5547

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&lt;210&gt; 5548

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5548

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Phe	Val	Ile	Pro	Lys	Lys	Asn	Val	Pro	Thr	Ser	Lys	Arg	Glu	Thr	Tyr
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Thr	Glu	Asp	Phe	Ile	Lys	Lys	Gln	Ile	Glu	Glu	Phe	Asn	Ile	Gly	Lys
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Arg	His	Leu	Ala	Asn	Met	Met	Gly	Glu	Asp	Pro	Glu	Thr	Phe	Thr	Gln
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Glu	Asp	Ile	Asp	Arg	Ala	Ile	Ala	Tyr	Leu	Phe	Pro	Ser	Gly	Leu	Phe
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Glu	Lys	Arg	Ala	Arg	Pro	Val	Met	Lys	His	Pro	Glu	Gln	Ile	Phe	Pro
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 <211> 1865  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5550

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5550

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Glu	Tyr	Tyr	Arg	Lys	Pro	Val	Glu	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Tyr
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			100					105					110		
Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala
		115					120					125			
Ala	Ser	Ala	Glu	Glu	Gln	Ala	Thr	Ile	Glu	Arg	Asn	Pro	Tyr	Thr	Ile
		130				135					140				
Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro
145					150					155				160	
Ile	Leu	Lys	Gly	Gly	Arg	Phe	Tyr	Gln	Val	Pro	Val	Pro	Leu	Pro	Asp
			165					170					175		
Arg	Arg	Arg	Arg	Phe	Leu	Ala	Met	Lys	Trp	Met	Ile	Thr	Glu	Cys	Arg
			180					185					190		
Asp	Lys	Lys	His	Gln	Arg	Thr	Leu	Met	Pro	Glu	Lys	Leu	Ser	His	Lys

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Leu	Leu Glu Ala Phe His	Asn Gln Gly Pro Val	Ile Lys Arg Lys His			
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Asp	Leu His Lys Met Ala Glu Ala Asn Arg Ala	Leu Ala His Tyr Arg				
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Trp	Trp					

<210> 5551  
 <211> 1689  
 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

<400> 5552  
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 Tyr Leu Leu Asp Pro Tyr Val Asn Leu Ala Pro Gly Cys Arg Ser Leu  
 35 40 45  
 Phe Ser Val Ile Val Arg Val Val Gly Asp Leu Met Leu Arg Ile Gln  
 50 55 60  
 Arg Ile Gln Asp Phe Thr Pro Lys Leu Leu Leu Val Arg Lys Arg Leu  
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 <212> DNA  
 <213> Homo sapiens

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<212> PRT  
<213> Homo sapiens

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Pro Gln Pro His Pro Thr Ala Ser Pro Asp Pro Lys Val Arg Ile Thr  
35 40 45  
Gly Pro Ala Thr Ala Pro Ala Val Val Leu Ser His Tyr Arg Gly Cys  
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<212> DNA  
<213> Homo sapiens

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<212> PRT  
<213> Homo sapiens

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Gln	Ala	Lys	Leu	Glu	Asp	Ser	Pro	Asp	Leu	Arg	Gly	Ser	Thr	Arg	Ser				
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Arg	Cys	Leu	Leu	Asp	Leu	Ser	His	Ser	Ala	His	Pro	Asn	Leu	Asn	Pro				
65					70				75					80					
Ala	Pro	Gly	Pro	Thr	Pro	Val	Pro	Trp	Leu	Glu	Thr	Gly	Ala	Ser	Ala				
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Gln	Leu	Phe	Pro	Phe	Ser	His	Ser	Leu	Ser	Ala	Ala	Cys	Arg	Val	His				
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&lt;210&gt; 5557

&lt;211&gt; 1970

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5557

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&lt;210&gt; 5558

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5558

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			20					25					30		
Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
		35					40					45			
Glu	Pro	Ser	Cys	Ser	Gly	Ser	Ser	Leu	Gly	Pro	Asp	Lys	Gly	Leu	Ala
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Gln	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ala	Thr	Arg	Gln	Lys	Pro	Ser
65				70					75					80	
Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
			85					90					95		
Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
		100					105						110		
Glu	Val	Ile	Leu	Ser	Ala	Ser	Gly	Ala	Cys	Lys	Leu	Ile	Asp	Ser	Leu
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His	Ser	Tyr	Cys	Phe	Ser	Ser	Arg	Gln	Asn	Lys	Ser	Gln	Val	Cys	Cys

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Gln Arg Val Ser Arg	Ser Asp Ser Gln Val Arg	Lys Leu Gln Glu Lys		
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Leu Asp Glu Leu Arg	Arg Val Ser Val Pro Tyr	Pro Ser Ser Leu Leu		
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Ser Pro Ser Arg Glu	Pro Pro Lys Met Asn Pro	Val Val Glu Pro Leu		
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Ser Trp Met Leu Gly	Thr Trp Leu Ser Asp Pro	Pro Gly Ala Gly Thr		
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Tyr Pro Thr Leu Gln	Pro Phe Gln Tyr Leu Glu	Glu Val His Ile Ser		
225	230	235	240	
His Val Gly Gln Pro	Met Leu Asn Phe Ser Phe	Asn Ser Phe His Pro		
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Asp Thr Arg Lys Pro	Met His Arg Glu Cys Gly	Phe Ile Arg Leu Lys		
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Pro Asp Thr Asn Lys	Val Ala Phe Val Ser Ala	Gln Asn Thr Gly Val		
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Gln Ile Thr Arg Lys	Phe Arg Leu Asn Ser Glu	Gly Lys Leu Glu Gln		
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Thr Val Ser Met Ala	Thr Thr Thr Gln Pro	Met Thr Gln His Leu His		
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Val Thr Tyr Lys Lys	Val Thr Pro			
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&lt;210&gt; 5559

&lt;211&gt; 3866

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5559

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 <213> Homo sapiens

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 Glu Ile Lys Leu Glu Ile Asn Met Leu Lys Lys Tyr Ser His His Arg  
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 His Asp Asp Gln Leu Trp Leu Val Met Glu Phe Cys Gly Ala Gly Ser  
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 Trp Ile Ala Tyr Ile Ser Arg Glu Ile Leu Arg Gly Leu Ala His Leu  
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 Thr Tyr Asp Tyr Arg Ser Asp Leu Trp Ser Cys Gly Ile Thr Ala Ile  
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 Glu Met Ala Glu Gly Ala Pro Pro Leu Cys Asp Met His Pro Met Arg  
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 Ala Leu Phe Leu Ile Pro Arg Asn Pro Pro Pro Arg Leu Lys Ser Lys  
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 Lys Trp Ser Lys Lys Phe Ile Asp Phe Ile Asp Thr Cys Leu Ile Lys  
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 Thr Tyr Met Gln Arg Pro Thr Thr Glu Gln Leu Leu Lys Phe Pro Phe  
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 Ile Arg Asp Gln Pro Thr Glu Arg Gln Val Arg Ile Gln Leu Lys Asp  
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 His Ile Asp Arg Thr Arg Lys Lys Arg Gly Glu Lys Glu Glu Thr Glu  
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 Gly Glu Pro Ser Ser Ile Met Asn Val Pro Gly Glu Ser Thr Leu Arg

4744



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Thr Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe Asn Ser Glu Ile Leu				
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Cys Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly				
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Leu Val Thr Ile Ser Gly Lys Lys Asp Lys Leu Arg Val Tyr Tyr Leu				
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Ser Trp Leu Arg Asn Lys Ile Leu His Asn Asp Pro Glu Val Glu Lys				
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Lys Gln Gly Trp Thr Thr Val Gly Asp Leu Glu Gly Cys Val His Tyr				
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Lys Val Val Lys Tyr Glu Arg Ile Lys Phe Leu Val Ile Ala Leu Lys				
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Ser Ser Val Glu Val Tyr Ala Trp Ala Pro Lys Pro Tyr His Lys Phe				
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Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp				
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Ile Tyr Leu Pro Thr His Val Arg Lys Asn Pro His Ser Met Ile Gln				
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Cys Ser Ile Lys Pro His Ala Ile Ile Ile Leu Pro Asn Thr Asp Gly				
	1045		1050	1055
Met Glu Leu Leu Val Cys Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr				
	1060		1065	1070
Tyr Gly Arg Ile Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro				
	1075		1080	1085
Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly Glu				
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Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val				
1105		1110		1115
Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn				
	1125		1130	1135
Asp Lys Val Phe Phe Ala Ser Val Arg Ser Gly Gly Ser Ser Gln Val				
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&lt;210&gt; 5561

&lt;211&gt; 2089

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 5562

&lt;211&gt; 372

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5562

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&lt;210&gt; 5563

&lt;211&gt; 2878

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5563

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<210> 5564

<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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			20					25					30		
Ser	Ala	Glu	Arg	Ala	Leu	Glu	Glu	Ala	Val	Ala	Thr	Gly	Thr	Leu	Asn
		35					40					45			
Leu	Ser	Asn	Arg	Arg	Leu	Lys	His	Phe	Pro	Arg	Gly	Ala	Ala	Arg	Ser
	50					55					60				
Tyr	Asp	Leu	Ser	Asp	Ile	Thr	Gln	Ala	Asp	Leu	Ser	Arg	Asn	Arg	Phe
65					70					75				80	
Pro	Glu	Val	Pro	Glu	Ala	Ala	Cys	Gln	Leu	Val	Ser	Leu	Glu	Gly	Leu
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Ser	Leu	Tyr	His	Asn	Cys	Leu	Arg	Cys	Leu	Asn	Pro	Ala	Leu	Gly	Asn
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Leu	Arg	Gln	Leu	Asp	Val	Ser	Ser	Asn	Glu	Leu	Gln	Ser	Leu	Pro	Ser
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Glu	Leu	Cys	Gly	Leu	Ser	Ser	Leu	Arg	Asp	Leu	Asn	Val	Arg	Arg	Asn
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Ser	Pro	Pro	Ala	Gln	Val	Cys	Leu	Lys	Gly	Lys	Leu	His	Ile	Phe	Lys
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			260					265					270			
Ala	Pro	Ser	Arg	Pro	Pro	Ser	Phe	Ser	Pro	Cys	Pro	Ala	Glu	Asp	Leu	
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Val	Asp	Ser	Gly	Ser	Lys	Arg	Trp	Ser	Gly	Asn	Glu	Ser	Thr	Asp	Glu	
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Gly	Pro	Arg	Glu	Arg	Lys	Glu	Asp	Gly	Ser	Ala	Asp	Gly	Asp	Pro	Val	
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Gly	Thr	Val	Glu	Glu	Gln	Arg	Pro	Pro	Glu	Leu	Ser	Pro	Gly	Ala	Gly	
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Asp	Arg	Glu	Arg	Ala	Pro	Ser	Ser	Arg	Arg	Glu	Glu	Pro	Ala	Gly	Glu	
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Glu	Arg	Arg	Arg	Pro	Asp	Thr	Leu	Gln	Leu	Trp	Gln	Glu	Arg	Glu	Arg	
				405					410					415		
Arg	Gln	Gln	Gln	Gln	Ser	Gly	Ala	Trp	Gly	Ala	Pro	Arg	Lys	Asp	Ser	
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Ala	Gly	Gly	Cys	Ser	Gly	Ala	Gly	Ser	Pro	Ala	Pro	Ala	Pro	Ala	Ser	
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Gln	Glu	Pro	Leu	Pro	Ile	Ala	Gly	Pro	Ala	Thr	Ala	Pro	Ala	Pro	Arg	
				485					490					495		
Pro	Leu	Gly	Ser	Ile	Gln	Arg	Pro	Asn	Ser	Phe	Leu	Phe	Arg	Ser	Ser	
			500					505					510			
Ser	Gln	Ser	Gly	Ser	Gly	Pro	Ser	Ser	Pro	Asp	Ser	Val	Leu	Arg	Pro	
		515					520					525				
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	530					535					540					
Arg	Gln	Val	Leu	Glu	Ser	Arg	Leu	Gln	Arg	Pro	Leu	Pro	Glu	Asp	Leu	
545					550					555					560	
Ala	Glu	Ala	Leu	Ala	Ser	Gly	Val	Ile	Leu	Cys	Gln	Leu	Ala	Asn	Gln	
				565					570					575		
Leu	Arg	Pro	Arg	Ser	Val	Pro	Phe	Ile	His	Val	Pro	Ser	Pro	Ala	Val	
			580					585					590			
Pro	Lys	Leu	Ser	Ala	Leu	Lys	Ala	Arg	Lys	Asn	Val	Glu	Ser	Phe	Leu	
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 <212> DNA  
 <213> Homo sapiens

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<210> 5566  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

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 Leu Pro Pro Arg Leu Glu Ser Gly Gly Ala Ile Thr Ala His Ser Ser  
 35 40 45  
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 Ala Gly Ser Thr Gly Ala Tyr His Ala Trp Leu Phe  
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<210> 5567  
 <211> 968  
 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

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 His Arg Ser Ile His Leu Ala Pro Leu Gln Ile Trp Val Leu Cys Lys  
 35 40 45  
 Ile Leu Pro Trp Asp Thr Glu Gly Lys Ser Asp Thr Ala Leu Leu Ser  
 50 55 60  
 Ser Ser Gln Thr Leu Arg Tyr Pro Asp Thr Thr Ala Leu Ile Val Ser  
 65 70 75 80  
 Glu Asn Thr Ala Thr Ser Ala Gly Lys Tyr Gln Arg Cys Phe Thr Arg  
 85 90 95  
 Tyr Met Tyr Gln Ile Leu Lys Ala Ala Val Pro Lys Tyr His Lys Leu  
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 Asp Val  
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<210> 5569  
 <211> 876

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5569

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&lt;210&gt; 5570

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5570

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Leu Val Gln Ala Val Glu Tyr Asn Ile Phe Glu Gly Met Glu Cys His
20     25     30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35     40     45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50     55     60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65     70     75     80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85     90     95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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Val Leu Gln Ala Phe Ile Ser Phe Arg Ala Ala Pro Ser Leu Cys Pro
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Gly Thr Leu Ala Lys Met Gln Cys Leu Pro Asn Ser His Ile Ser Phe
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Gln Val Gln Val Pro Val Cys Asp Gly
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<210> 5571  
 <211> 405  
 <212> DNA  
 <213> Homo sapiens

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<210> 5572  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 5572  
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 Gln Leu Arg Asp Pro Thr Ser Pro Lys Phe Pro Glu Asp Phe Asp Asp  
 35 40 45  
 Gly Glu His Ala Lys Gln Lys Ser Val Ile Ser Trp Leu Leu Asn His  
 50 55 60  
 Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Leu Lys Ser Glu Leu  
 65 70 75 80  
 Leu Pro Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu His  
 85 90 95  
 His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Met Met Ala  
 100 105 110  
 Gln Ile Phe Ser Gln Arg Leu Ala Gly Ala Gly Gly Gly Tyr Arg  
 115 120 125  
 Ser Arg Leu Gly Val Pro Arg

130

135

&lt;210&gt; 5573

&lt;211&gt; 1279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5573

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&lt;210&gt; 5574

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 <212> PRT  
 <213> Homo sapiens

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 Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu  
 35 40 45  
 Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val  
 50 55 60  
 Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys  
 65 70 75 80  
 Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro  
 85 90 95  
 Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly  
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 115 120 125  
 Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro  
 130 135 140  
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 145 150 155 160  
 Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro  
 165 170 175  
 Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile  
 180 185 190  
 Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu  
 195 200 205  
 Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn  
 210 215 220  
 Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val  
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 245 250 255  
 Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu  
 260 265 270  
 Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp  
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<210> 5575  
 <211> 2405  
 <212> DNA  
 <213> Homo sapiens

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 <211> 367  
 <212> PRT  
 <213> Homo sapiens

<400> 5576  
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 35 40 45  
 Gln Leu Leu Gln Cys Leu Val Pro Gly Ser Thr Thr Leu His Ser Ala  
 50 55 60  
 Glu Ile Leu Ala Glu Ile Ala Arg Ile Leu Arg Pro Gly Gly Cys Leu  
 65 70 75 80  
 Phe Leu Lys Glu Pro Val Glu Thr Ala Val Asp Asn Asn Ser Lys Val  
 85 90 95  
 Lys Thr Ala Ser Lys Leu Cys Ser Ala Leu Thr Leu Ser Gly Leu Val  
 100 105 110  
 Glu Val Lys Glu Leu Gln Arg Glu Pro Leu Thr Pro Glu Glu Val Gln  
 115 120 125  
 Ser Val Arg Glu His Leu Gly His Glu Ser Asp Asn Leu Leu Phe Val  
 130 135 140  
 Gln Ile Thr Gly Lys Lys Pro Asn Phe Glu Val Gly Ser Ser Arg Gln  
 145 150 155 160  
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<210> 5577
<211> 659
<212> DNA
<213> Homo sapiens
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<210> 5578  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 5578  
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 Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu  
 35 40 45  
 Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys  
 50 55 60  
 Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg  
 65 70 75 80  
 Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu  
 85 90 95  
 Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met  
 100 105 110  
 Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu  
 115 120 125  
 Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg  
 130 135 140  
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 145 150 155 160  
 Cys Ser Ile Ala Glu Pro  
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<210> 5579  
 <211> 1312  
 <212> DNA  
 <213> Homo sapiens

<400> 5579  
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<210> 5580

<211> 283

<212> PRT

<213> Homo sapiens

<400> 5580

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			20					25					30		
Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
			35				40					45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
			50			55					60				
Pro	Val	Pro	Arg	Ala	Pro	Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu
65					70					75					80
Pro	Ala	Pro	Pro	Ala	Gln	Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala
				85					90					95	
Pro	Ala	Val	Arg	Gln	Val	Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val
			100					105					110		
Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
		115				120						125			
Thr	Gly	Pro	Gln	Leu	Thr	Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr
		130				135					140				
Glu	Pro	Pro	Arg	Pro	Val	His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln
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<212> DNA
<213> Homo sapiens
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<213> Homo sapiens
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35           40           45
Pro Ser Ser Lys Asn Leu Trp Glu Gln Ile Cys Lys Glu Tyr Glu Ala
50           55           60
Glu Gln Pro Pro Phe Pro Glu Gly Tyr Lys Val Lys Gln Glu Pro Val
65           70           75           80
Ile Thr Val Ala Pro Val Glu Glu Met Leu Phe His Gly Phe Ser Ala
85           90           95
Glu His Tyr Phe Pro Val Ser His Phe Thr Met Ile Ser Arg Thr Pro
100          105          110
Cys Pro Gln Asp Lys Ser Glu Thr Ile Asn Pro Lys Thr Cys Ser Pro
115          120          125
Lys Glu Tyr Leu Glu Thr Phe Ile Phe Pro Val Leu Leu Pro Gly Met
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Ala Ser Leu Leu His Gln Ala Lys Lys Glu Lys Cys Phe Glu Val Ser
145          150          155          160
Cys Leu Ala Gly Phe Leu Tyr Phe Glu Ile Leu Asn His Ser Leu Leu
165          170          175
Ser Asp Asp Ser Ser Leu Ser Trp Tyr His Gln Val Val Leu Gln Met
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 <213> Homo sapiens

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<210> 5584

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5584

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Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
          35           40           45
Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
          50           55           60
Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
65           70           75           80
Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
          85           90           95
Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
          100          105          110
Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
          115          120          125
Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
          130          135          140
Met Pro Ala Ala Glu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
145          150          155          160
Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
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Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
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Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
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Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
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Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
          275          280          285
Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
          290          295          300
Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
305          310          315          320
Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
          325          330          335
Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
          340          345          350
Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
          355          360          365
Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
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Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

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385          390          395          400
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Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Phe Lys Leu
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<210> 5585
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<212> DNA
<213> Homo sapiens

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<210> 5586
<211> 87
<212> PRT
<213> Homo sapiens

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Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

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	35					40						45							
Ser	Ser	Lys	Leu	Leu	Cys	Ser	Met	Thr	Ala	Ala	Cys	Pro	Thr	Leu	Ser				
	50					55					60								
Leu	Leu	Asp	Leu	Gln	Leu	Arg	Leu	Arg	Arg	Glu	Val	Gly	Glu	Gly	His				
65					70					75					80				
Cys	Pro	Ile	Leu	Asp	Leu	Thr													
					85														

&lt;210&gt; 5587

&lt;211&gt; 853

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5587

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&lt;210&gt; 5588

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5588

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<210> 5589
<211> 1327
<212> DNA
<213> Homo sapiens
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720

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 aaaaaaa  
 1327

&lt;210&gt; 5590

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5590

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Ser	Gly	Ser	Ser	Asp	Ala	Asp	Gln	Arg	Asp	Pro	Ala	Ala	Pro	Glu	Pro
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Glu	Glu	Gln	Glu	Glu	Arg	Lys	Pro	Ser	Ala	Thr	Gln	Gln	Lys	Lys	Asn
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Thr	Lys	Leu	Ser	Ser	Lys	Thr	Thr	Ala	Lys	Leu	Ser	Thr	Ser	Ala	Lys
	50				55					60					
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65				70					75						80
Cys	Ser	Ala	Gly	Pro	Lys	Gly	Asp	Asn	Ile	Tyr	Glu	Trp	Arg	Ser	Thr
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Ile	Leu	Gly	Pro	Pro	Gly	Ser	Val	Tyr	Glu	Gly	Gly	Val	Phe	Phe	Leu
		100					105						110		
Asp	Ile	Thr	Phe	Ser	Ser	Asp	Tyr	Pro	Phe	Lys	Pro	Pro	Lys	Val	Thr
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Phe	Arg	Thr	Arg	Ile	Tyr	His	Cys	Asn	Ile	Asn	Ser	Gln	Gly	Val	Ile
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Cys	Leu	Asp	Ile	Leu	Lys	Asp	Asn	Trp	Ser	Pro	Ala	Leu	Thr	Ile	Ser
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Asp	Pro	Leu	Val	Gly	Ser	Ile	Ala	Thr	Gln	Tyr	Leu	Thr	Asn	Arg	Ala
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195

200

205

&lt;210&gt; 5591

&lt;211&gt; 2194

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5591

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<210> 5592

<211> 580

<212> PRT

<213> Homo sapiens

<400> 5592

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580

&lt;210&gt; 5593

&lt;211&gt; 3078

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5593

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 Tyr Gly Ala Lys Ala Glu Leu Pro Lys Tyr Lys Ser Phe Asn Arg Thr  
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 Ala Met Pro Tyr Gly Gly Tyr Glu Lys Ala Ser Lys Arg Met Thr Phe  
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&lt;210&gt; 5598

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5598

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&lt;210&gt; 5599

&lt;211&gt; 4492

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<213> Homo sapiens

<400> 5600

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Ala	Tyr	Val	Arg	Val	Leu	Asp	Leu	His	Lys	Lys	Pro	Phe	Leu	Ala	Lys
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Tyr	Phe	Pro	Phe	Met	Asp	Leu	Lys	Leu	Arg	Ala	Ala	Ser	Pro	Ile	Ile
	50					55					60				
Thr	Leu	Val	Ala	Leu	Asp	Glu	Ala	Leu	Asp	Asn	Tyr	Thr	Ile	Thr	Phe
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Leu	Ile	Arg	Gly	Val	Ala	Ile	Gly	Gln	Thr	Ser	Leu	Thr	Ala	Ser	Val
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Thr	Asn	Lys	Ala	Gly	Gln	Arg	Ile	Asn	Ser	Ala	Pro	Gln	Gln	Ile	Glu
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Ile Ile Val Ala Val Lys Val Ser Pro Val Ser Tyr Leu Arg Val Ser
          405          410          415
Met Ser Pro Val Leu His Thr Gln Asn Lys Glu Ala Leu Val Ala Val
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Pro Leu Gly Met Thr Val Thr Phe Thr Val His Phe His Asp Asn Ser
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Gly Asp Val Phe His Ala His Ser Ser Val Leu Asn Phe Ala Thr Asn
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Arg Asp Asp Phe Val Gln Ile Gly Lys Gly Pro Thr Asn Asn Thr Cys
465          470          475          480
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Pro Glu Thr Leu Ile Ser Cys Gln Ser Gln Phe Lys Pro Ala Val Phe
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Ala Leu Gly Gln Tyr Phe Cys Ser Ile Thr Met His Arg Leu Thr Asp
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Ala Ser Leu Ser Ser Ser His Phe Ser Thr Glu Gln Val Gly Ala Glu
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<211> 560

<212> PRT

<213> Homo sapiens

<400> 5604

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Gln	Lys	Asp	Tyr	Val	Thr	Val	Gln	Leu	Gln	Asn	Gly	Glu	Ile	Trp	Glu
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Leu	Ser	Arg	Cys	Ser	Arg	Asn	Lys	Arg	Glu	Asn	Thr	Ser	Ser	Leu	Gly
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Tyr	Glu	Tyr	Thr	Gly	Ser	Lys	Lys	Glu	Phe	Pro	Cys	Val	Asp	Gly	Tyr
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Ile	Tyr	Asp	Gln	Asn	Thr	Trp	Lys	Ser	Thr	Ala	Val	Thr	Gln	Trp	Asn
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Leu	Val	Cys	Asp	Arg	Lys	Trp	Leu	Ala	Met	Leu	Ile	Gln	Pro	Leu	Phe
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Met	Phe	Gly	Val	Leu	Leu	Gly	Ser	Val	Thr	Phe	Gly	Tyr	Phe	Ser	Asp
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Arg	Leu	Gly	Arg	Arg	Val	Val	Leu	Trp	Ala	Thr	Ser	Ser	Ser	Met	Phe
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Leu	Phe	Gly	Ile	Ala	Ala	Ala	Phe	Ala	Val	Asp	Tyr	Tyr	Thr	Phe	Met
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Ala	Ala	Arg	Phe	Phe	Leu	Ala	Met	Val	Ala	Ser	Gly	Tyr	Leu	Val	Val
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Ala	Leu	Thr	Gly	Tyr	Leu	Val	Arg	Thr	Trp	Trp	Leu	Tyr	Gln	Met	Ile
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Leu	Ser	Thr	Val	Thr	Val	Pro	Phe	Ile	Leu	Cys	Cys	Trp	Val	Leu	Pro
			260					265					270		
Glu	Thr	Pro	Phe	Trp	Leu	Leu	Ser	Glu	Gly	Arg	Tyr	Glu	Glu	Ala	Gln
		275					280					285			
Lys	Ile	Val	Asp	Ile	Met	Ala	Lys	Trp	Asn	Arg	Ala	Ser	Ser	Cys	Lys
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Pro	Thr	Glu	Val	Gln	Lys	His	Asn	Leu	Ser	Tyr	Leu	Phe	Tyr	Asn	Trp
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Ser	Ile	Thr	Lys	Arg	Thr	Leu	Thr	Val	Trp	Leu	Ile	Trp	Phe	Thr	Gly

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Tyr Thr Phe Val Cys Ile Ala Met Asp Lys Val Gly Arg Arg Thr Val
385          390          395          400
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Val Ile Pro Gln Lys His Tyr Ile Leu Gly Val Val Thr Ala Met Val
          420          425          430
Gly Lys Phe Ala Ile Gly Ala Ala Phe Gly Leu Ile Tyr Leu Tyr Thr
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Ala Glu Leu Tyr Pro Thr Ile Val Arg Ser Leu Ala Val Gly Ser Gly
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Ser Met Val Cys Arg Leu Ala Ser Ile Leu Ala Pro Phe Ser Val Asp
465          470          475          480
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Lys Arg Leu Ala Thr Thr Trp Glu Ala Ala Lys Leu Glu Ser Glu
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 <213> Homo sapiens

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&lt;400&gt; 5606

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Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Leu Ser Ser
      35           40           45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
      50           55           60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
      65           70           75           80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
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Phe Pro Phe Thr Arg
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&lt;210&gt; 5607

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5607

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320

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&lt;210&gt; 5608

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5608

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Glu Phe Gly Lys Gly Leu Gly Arg His Ala Glu Gly Arg Val Glu Pro
      20           25           30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35           40           45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50           55           60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
      65           70           75           80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
      85           90           95
Pro Gly Ala Leu Gln Ala Gly Arg Pro Gln

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105

&lt;210&gt; 5609

&lt;211&gt; 1843

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5609

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1380

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<212> PRT  
<213> Homo sapiens

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Phe Thr Gly Gly Arg Gln Asp His Thr Ser Leu Pro His Trp Ala Cys  
35 40 45  
Leu Leu Val Asp Ser Cys Met Gln Glu Ala Val Met Gly Ser Leu Arg  
50 55 60  
Ile Pro Gln Cys Gly Asn Gly Pro Leu Arg Leu Val Leu Arg Val Pro  
65 70 75 80  
Gly Ala Gln Ser Trp Val Gly Gly Cys Trp Trp Glu Val Arg Asn Lys  
85 90 95  
Phe Trp Leu Pro Ser Gly Gln Leu Pro Thr Ala Leu Thr Trp Glu Val  
100 105 110  
Asp Ala His Arg Gln Asp Ala Leu Gly Tyr Cys Cys Thr Val Leu His  
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<212> DNA  
<213> Homo sapiens

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 1152

&lt;210&gt; 5612

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5612

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			20					25				30			
Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln	Ser	Arg	Gln
		35					40					45			
Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu	Leu	Arg	Gln	Lys
	50					55					60				
Asn	Ala	Val	Leu	Asn	Lys	Leu	Lys	Thr	Ala	Ile	Gly	Ala	Val	Glu	Lys
65				70						75				80	
Asp	Val	Gly	Leu	Ser	Asp	Glu	Glu	Lys	Leu	Phe	Gln	Val	His	Thr	Phe

				85					90					95			
Glu	Ile	Phe	Gln	Lys	Glu	Leu	Asn	Glu	Ser	Glu	Asn	Ser	Val	Phe	Gln		
			100					105					110				
Ala	Val	Tyr	Gly	Leu	Gln	Arg	Ala	Leu	Gln	Gly	Asp	Tyr	Lys	Asp	Val		
		115					120				125						
Val	Asn	Met	Lys	Glu	Ser	Ser	Arg	Gln	Arg	Leu	Glu	Ala	Leu	Arg	Glu		
	130					135					140						
Ala	Ala	Ile	Lys	Glu	Glu	Thr	Glu	Tyr	Met	Glu	Leu	Leu	Ala	Ala	Glu		
145				150						155					160		
Lys	His	Gln	Val	Glu	Ala	Leu	Lys	Asn	Met	Gln	His	Gln	Asn	Gln	Ser		
			165					170						175			
Leu	Ser	Met	Leu	Asp	Glu	Ile	Leu	Glu	Asp	Val	Arg	Lys	Ala	Ala	Asp		
		180						185					190				
Arg	Leu	Glu	Glu	Glu	Ile	Glu	Glu	His	Ala	Phe	Asp	Asp	Asn	Lys	Ser		
	195					200					205						
Val	Lys	Gly	Val	Asn	Phe	Glu	Ala	Val	Leu	Arg	Val	Glu	Glu	Glu	Glu		
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Ala	Asn	Ser	Lys	Gln	Asn	Ile	Thr	Lys	Arg	Glu	Val	Glu	Asp	Asp	Leu		
225				230						235					240		
Val	Leu	Ser	Met	Leu	Ile	Asp	Ser	Gln	Asn	Asn	Gln	Tyr	Ile	Leu	Thr		
			245					250						255			
Lys	Pro	Arg	Asp	Ser	Thr	Ile	Pro	Arg	Ala	Asp	His	His	Phe	Ile	Lys		
		260						265					270				
Asp	Ile	Val	Thr	Ile	Gly	Met	Leu	Ser	Leu	Pro	Cys	Gly	Trp	Arg	Cys		
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 <211> 1679  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5614

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5614

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		20						25					30		
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
		35					40					45			
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
	50					55					60				
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
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Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys

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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Ser Ser Ser Thr Val Pro Pro Pro His Arg Pro Leu Tyr Gln Pro  
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 65 70 75 80  
 Trp Leu Met Met Gln Ser Tyr Met Asp Pro Arg Met Met Ser Gly Arg  
 85 90 95  
 Pro Ala Met Asp Ile Pro Pro Ile His Pro Gly Met Ile Pro Pro Lys  
 100 105 110  
 Pro Leu Met Arg Arg Asp Gln Met Glu Gly Ser Pro Asn Ser Ser Glu  
 115 120 125  
 Ser Phe Glu His Ile Ala Arg Ser Ala Arg Asp His Ala Ile Ser Leu  
 130 135 140  
 Ser Glu Pro Arg Met Leu Trp Gly Ser Asp Pro Tyr Pro His Ala Glu  
 145 150 155 160  
 Pro Gln Gln Ala Thr Thr Pro Lys Ala Thr Glu Glu Pro Glu Asp Val

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      165      170      175
Arg Ser Glu Ala Ala Leu Asp Gln Glu Gln Ile Thr Ala Ala Tyr Ser
      180      185      190
Val Glu His Asn Gln Leu Glu Ala His Pro Lys Ala Asp Phe Ile Arg
      195      200      205
Glu Ser Ser Glu Ala Gln Val Gln Lys Phe Leu Ser Arg Ser Val Glu
      210      215      220
Asp Val Arg Pro His His Thr Asp Ala Asn Asn Gln Ser Ala Cys Phe
225      230      235      240
Glu Ala Pro Asp Gln Lys Thr Leu Ser Thr Pro Gln Glu Glu Arg Ile
      245      250      255
Ser Ala Val Glu Ser Gln Pro Ser Arg Lys Arg Ser Val Ser His Gly
      260      265      270
Ser Asn His Thr Gln Lys Pro Asp Glu Gln Arg Ser Glu Pro Ser Ala
      275      280      285
Gly Ile Pro Lys Val Thr Ser Arg Cys Ile Asp Ser Lys Glu Pro Ile
      290      295      300
Glu Arg Pro Glu Glu Lys Pro Lys Lys Glu Gly Phe Ile Arg Ser Ser
305      310      315      320
Glu Gly Pro Lys Pro Glu Lys Val Tyr Lys Ser Lys Ser Glu Thr Arg
      325      330      335
Trp Gly Pro Arg Pro Ser Ser Asn Arg Arg Glu Glu Val Asn Asp Arg
      340      345      350
Pro Val Arg Arg Ser Gly Pro Ile Lys Lys Pro Val Leu Arg Asp Met
      355      360      365
Lys Glu Glu Arg Glu Gln Arg Lys Glu Lys Glu Gly Glu Lys Ala Glu
      370      375      380
Lys Val Thr Glu Lys Val Val Val Lys Pro Glu Lys Thr Glu Lys Lys
385      390      395      400
Asp Leu Pro Pro Pro Pro Pro Pro Pro Gln Pro Pro Ala Pro Ile Gln
      405      410      415
Pro Gln Ser Val Pro Pro Pro Ile Gln Pro Glu Ala Glu Lys Phe Pro
      420      425      430
Ser Thr Glu Thr Ala Thr Leu Ala Gln Lys Pro Ser Gln Asp Thr Glu
      435      440      445
Lys Pro Leu Glu Pro Val Ser Thr Val Gln Val Glu Pro Ala Val Lys
      450      455      460
Thr Val Asn Gln Gln Thr Met Ala Ala Pro Val Val Lys Glu Lys Glu
465      470      475      480
Leu Gln Lys Lys Glu Arg Lys Gln Glu Lys Glu Lys Glu Leu Glu Arg
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Gln Lys Glu Lys Glu Lys Glu Leu Gln Lys Lys
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&lt;210&gt; 5617

&lt;211&gt; 3480

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5617

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aataagtttt cgtaggttat actatcattt ttttttctga cttttagaaa aaaaatgatc
120

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<210> 5618  
 <211> 1003  
 <212> PRT  
 <213> Homo sapiens

<400> 5618

His	Lys	Asp	Ser	Ile	Ser	Leu	Phe	Met	Ala	His	Val	His	Thr	Thr	Val
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Asn	Glu	Met	Ser	Thr	Arg	Tyr	Tyr	Gln	Asn	Glu	Arg	Arg	His	Asn	Tyr
			20					25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
		35					40					45			
Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
	50				55						60				
Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
65					70					75				80	
Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
			85						90					95	
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
			100					105					110		
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
		115				120						125			
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
	130					135					140				
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150					155				160	
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
			165					170					175		
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
		180					185					190			
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
	195					200						205			
Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
	210				215						220				
Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230					235				240	
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
			245					250						255	
Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
		260					265					270			
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
	275					280					285				
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
	290				295					300					
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
305					310					315				320	
Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
			325					330					335		
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

```

          340          345          350
Thr Arg Gln Tyr Arg Gln Glu Leu Val His Cys Lys Trp Val Pro Phe
          355          360          365
Leu Gln Gln Lys Val Ser Ile Pro Leu Thr Glu Gly Leu Asp Leu Ile
          370          375          380
Ser Met Leu Thr Asp Asp Ala Thr Ile Ala Ala Trp Asn Asn Glu Gly
385          390          395          400
Leu Pro Ser Asp Arg Met Ser Thr Glu Asn Ala Ala Ile Leu Thr His
          405          410          415
Cys Glu Arg Trp Pro Leu Val Ile Asp Pro Gln Gln Gln Gly Ile Lys
          420          425          430
Trp Ile Lys Asn Lys Tyr Gly Met Asp Leu Lys Val Thr His Leu Gly
          435          440          445
Gln Lys Gly Phe Leu Asn Ala Ile Glu Thr Ala Leu Ala Phe Gly Asp
          450          455          460
Val Ile Leu Ile Glu Asn Leu Glu Glu Thr Ile Asp Pro Val Leu Asp
465          470          475          480
Pro Leu Leu Gly Arg Asn Thr Ile Lys Lys Gly Lys Tyr Ile Arg Ile
          485          490          495
Gly Asp Lys Glu Cys Glu Phe Asn Lys Asn Phe Arg Leu Ile Leu His
          500          505          510
Thr Lys Leu Ala Asn Pro His Tyr Lys Pro Glu Leu Gln Ala Gln Thr
          515          520          525
Thr Leu Leu Asn Phe Thr Val Thr Glu Asp Gly Leu Glu Ala Gln Leu
          530          535          540
Leu Ala Glu Val Val Ser Ile Glu Arg Pro Asp Leu Glu Lys Leu Lys
545          550          555          560
Leu Val Leu Thr Lys His Gln Asn Asp Phe Lys Ile Glu Leu Lys Tyr
          565          570          575
Leu Glu Asp Asp Leu Leu Leu Arg Leu Ser Ala Ala Glu Gly Ser Phe
          580          585          590
Leu Asp Asp Thr Lys Leu Val Glu Arg Leu Glu Ala Thr Lys Thr Thr
          595          600          605
Val Ala Glu Ile Glu His Lys Val Ile Glu Ala Lys Glu Asn Glu Arg
          610          615          620
Lys Ile Asn Glu Ala Arg Glu Cys Tyr Arg Pro Val Ala Ala Arg Ala
625          630          635          640
Ser Leu Leu Tyr Phe Val Ile Asn Asp Leu Gln Lys Ile Asn Pro Leu
          645          650          655
Tyr Gln Phe Ser Leu Lys Ala Phe Asn Val Leu Phe His Arg Ala Ile
          660          665          670
Glu Gln Ala Asp Lys Val Glu Asp Met Gln Gly Arg Ile Ser Ile Leu
          675          680          685
Met Glu Ser Ile Thr His Ala Val Phe Leu Tyr Thr Ser Gln Ala Leu
          690          695          700
Phe Glu Lys Asp Lys Leu Thr Phe Leu Ser Gln Met Ala Phe Gln Ile
705          710          715          720
Leu Leu Arg Lys Lys Glu Ile Asp Pro Leu Glu Leu Asp Phe Leu Leu
          725          730          735
Arg Phe Thr Val Glu His Thr His Leu Ser Pro Val Asp Phe Leu Thr
          740          745          750
Ser Gln Ser Trp Ser Ala Ile Lys Ala Ile Ala Val Met Glu Glu Phe
          755          760          765
Arg Gly Ile Asp Arg Asp Val Glu Gly Ser Ala Lys Gln Trp Arg Lys

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770		775		780
Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp				
785		790		795
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg				800
	805		810	815
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu				
	820		825	830
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe				
	835		840	845
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly				
	850		855	860
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe				
865		870		875
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln				
	885		890	895
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His				
	900		905	910
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr				
	915		920	925
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr				
	930		935	940
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile				
945		950		955
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro				
	965		970	975
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp				
	980		985	990
Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln				
	995		1000	

&lt;210&gt; 5619

&lt;211&gt; 1219

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5619

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 1219

&lt;210&gt; 5620

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5620

Met	Leu	Ser	Pro	Glu	Arg	Leu	Ala	Leu	Pro	Asp	Tyr	Glu	Tyr	Leu	Ala
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Gln	Arg	His	Val	Leu	Thr	Tyr	Met	Glu	Asp	Ala	Val	Cys	Gln	Leu	Leu
			20					25					30		
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
	35					40					45				
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
	50			55						60					
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65				70				75						80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85					90					95		
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
		100					105						110		
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp	
	115				120					125					
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
	130				135					140					
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145				150					155					160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165				170						175		
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

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<400> 5622
Met Ala Trp Leu Gly Arg Pro Gly Ser His Gly Leu Tyr Asn Lys Tyr
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Ile Cys Gly Ala Gly Ser Pro Gln Pro Gly Arg Ala Thr Ala Thr Val
      20             25             30
Gln Ser Ser Phe Arg Ala Pro Ser Phe Met Gly Pro Leu Ala Thr Phe

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      35              40              45
Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
  50              55              60
Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
  65              70              75              80
Thr Gly

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<210> 5623  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

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gcctttgatg attttcaaga gagttgtgct atgatgtggc aaaagtatgc aggaagcagg
  120
cggtcattgc ctctgggagc aaggatcctt ttccacgggtg tgttctatgc cgggggcttt
  180
gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
  240
gtggagcagc tgcagagcca tcccaggga caggaagctc tgggccctcc tctcaacatc
  300
cattatctca agctcatcga cagggaaaac ttcgtggaca ttgttgatgc caagttg
  357

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<210> 5624  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

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<400> 5624
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  1              5              10              15
Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
      20              25              30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
      35              40              45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
      50              55              60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
      65              70              75              80
Val Asp Ile Val Asp Ala Lys Leu
      85

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<210> 5625  
 <211> 1017  
 <212> DNA  
 <213> Homo sapiens

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 agcgagcagg cgcgagcca cctggagaag gcgtggttga tatcacagca aatcccacag  
 240  
 ttcgaagatg ttaaatttga agcagcaagt ctgttgtctg aattgtactg tcaagagaat  
 300  
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 420  
 gtgtcggcct gtgacctcct ggggtgtaggg gccgagtacg cccgggtggt gggatctgaa  
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 540  
 caggaggtgc acccgctgct gaccctctgc gggcagatcg tggagaactg gcaggggaac  
 600  
 cccatccaga aggagtcgct gcgtgtcttc ttctggtgc tccaggtcac ccactatctg  
 660  
 gatgccgggc aggtgaagag cgtgaagccg tgtctgaagc agctgcagca gtgcatccag  
 720  
 accatctcca cactgcacga tgatgagatc ctgcccagca accccgctga cctcttccac  
 780  
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 840  
 caggccggct acctggagaa ggcgcagaag tacacggaca aggccctcat gcagctggag  
 900  
 aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag  
 960  
 cacatcatca tgtgccgcct tgtcacgggt cacaaggcca cggcgctgca ggagatc  
 1017

&lt;210&gt; 5626

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5626

Ala	Asp	Ser	Trp	Tyr	Leu	Ala	Leu	Leu	Gly	Phe	Ala	Glu	His	Phe	Arg
1				5					10					15	
Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
		35					40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
	50				55					60					
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70					75				80	
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
				85					90					95	
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100						105					110	
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe



115	120	125
Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys		
130	135	140
Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu		
145	150	155
Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met		
165	170	175
Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln		
180	185	190
Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg		
195	200	205
Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln		
210	215	220
Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln		
225	230	235
Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala		
245	250	255
Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr		
260	265	270
Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala		
275	280	285
Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met		
290	295	300
Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu		
305	310	315
His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu		
325	330	335
Gln Glu Ile		

&lt;210&gt; 5627

&lt;211&gt; 1401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5627

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nctctcacac tgtggaattc tctctatcag cctcaaagtc cagatttgga aagggagtct
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cagcgagggg cagcagctgg cccaaccggg aggcagagcg gcaactgaac tctagccgga
120
aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgaccctca
180
catctgttcc tcgcgcccca gatggcttct getgectgct ccatggaccc catcgacagc
240
tttgagctcc tggatctcct gtttgaccgg caggacggca tcctgagaca cgtggagctg
300
ggcgagggct ggggtcacgt caaggaccag gtcctgccaa accccgactc tgacgacttc
360
ctcagctcca tcctgggctc tggagactca ctgcccagct cccactctg gtccccgaa
420
ggcagtata gtggcatctc cgaagacctc ccctccgacc ccaggacac ccctccagc
480
agcggaccag ccacctcccc cgccggctgc catcctgccc agcctggcaa ggggcctg
540

```

ctctctatc atcctggcaa ctcttgctcc accacaaccc cagggccagt gatccaacaa  
 600  
 cagcatcacc tgggggcctc ctacctcctg cgacctgggg ctgggcactg tcaggagctg  
 660  
 gtgctcaccg aggatgagaa gaagctgctg gctaaagaag gcatcacctt gccactcag  
 720  
 ctgccccctca ctaagtacga ggagcgagtg ctgaaaaaaaa tccgccggaa aatccggaac  
 780  
 aagcagtcgg cgcaagaaag caggaagaag aagaaggaat atatcgatgg cctggagact  
 840  
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 900  
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 960  
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 1020  
 gacccgaggc tgacacaacc cgagaagagt ctccaggaag ccccggggca gactggggct  
 1080  
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 1140  
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 1200  
 cgagcactgg ctccaggacgt gcagggtctg aggcggcggg agacgagctg tgagccccac  
 1260  
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 1320  
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 1380  
 ggcacagctc atagccacac a  
 1401

&lt;210&gt; 5628

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
1				5				10					15		
Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
		20					25					30			
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
	35				40						45				
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50				55					60					
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65				70				75						80	
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85				90							95	
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
			100				105						110		
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
	115					120					125				
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

```

      130      135      140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
145      150      155      160
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
      165      170      175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
      180      185      190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
      195      200      205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
      210      215      220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
225      230      235      240
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
      245      250      255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
      260      265      270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
      275      280      285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
      290      295

```

<210> 5629  
 <211> 428  
 <212> DNA  
 <213> Homo sapiens

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<400> 5629
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120
agccatcagg ggcagnctg ctattcaggt ctgggactgt gggactccag agcccatggt
180
ttttacgagg atgccatact gccacaatgg atggtgtctt tatctcctga tatatgattg
240
tgtgttggga ggcgtggggg ggcagctgga agaattggaga ggcattattg tggaggatct
300
tccccattc tctgtaccc tctcttgagg ctcccagttc catctgagaa attatctact
360
ctgagaaatc gtcacaacac agcatgggtg tgagtgcagt ggcagaagcc tgtgcctggg
420
tgtatggg
428

```

<210> 5630  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

```

<400> 5630
Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
1      5      10      15
Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

```

<400> 5632  
Met Gly Val Pro Trp Ala Trp Arg Arg Gln Gln Glu Gly Val Thr Gly

```

1           5           10           15
Ala Gly Ala Gly Ala Gly His Leu Thr Pro Gln Ala Ser Pro Thr Ser
20           25           30
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val
35           40           45
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg
50           55           60
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Thr Ser Ser Ser
65           70           75           80
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro
85           90           95
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys
100          105          110
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr
115          120          125
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser
130          135          140
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser
145          150          155          160
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln
165          170          175
Glu Arg Thr His Thr Thr Val
180

```

&lt;210&gt; 5633

&lt;211&gt; 2181

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5633

```

gccaatgtcc ctgtggccac tcagctgaga ccgagggcga cctgggcagc tgcgggtgtc
60
tgtcacctcc gtgtcccaca tagatgccag gctctgcttc tgtggttctg gaggtcatta
120
gtcaattgta tgtggtgctg tctgtcctcc tgattgcaga ggaggaagga accccttaaa
180
tgagcggggt ctgagtgctg gggccgctgg tctgctctgc ctggtgggat tctccagtgc
240
tggtttcatc tgtgccccag cccactctc accaacaagg agggcgtgaa aatgacaagg
300
aatccatccc tagagttcac aggagatcta gggcagagtt tccaagctgc agctgctctg
360
gccctgtgtg agctgctgct ctgaggaagc ccagggctga ggtagctacc aggcggaggc
420
tggttttgga ggctccaca tcaggaatt gagcggtagg ggtttcagcc ttcacgttgg
480
tcgccgcact gtatgggaag tggggctctgg ggtctgcttg ccagctctca ccgtcctctt
540
cctccccaaa gccgcctgga taaggggctg gccgcactgg tgcgggagcg tggcgcggat
600
ctggtggtca tcgagggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc
660
tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctgggcggc
720

```

cggtctttca gcgccatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc  
780  
ggactcttct gcttgtcact tgtccgagtg gcttcagaga tttaaaggggc cccctcataa  
840  
atgtgcctta attttcgcag ataacagggg gaatagacat ctttttggga gtcttcccct  
900  
ttgtcaggga gctactcctt agaggacag aggtcatcct ggcggtgcaac tcaggccccg  
960  
ccctgaacga cgtgaccac agcgagtccc tcatcgtggc agagcgtatt gcgggcatgg  
1020  
accctgaccg tgcgcagcct gctggacacc agggagcact gtctgaacga gttcaacttc  
1080  
ccggatccct actccaaagt gaagcagcgg gagaatggcg tggcgctgag gtgcttcccc  
1140  
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1320  
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1380  
attttcgcag ataacagtgg aatagacatc attttgggag tcttccccctt tgtcaggag  
1440  
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1500  
gtgaccacaca gcgagtcctt catcgtggca gagcgtattg cgggcatgga ccctgtcgtg  
1560  
cactctgcgc tccaggaaga gaggctgctg ctggtgcaga cgggctccag ctccccgtgc  
1620  
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1680  
ctggtggtca tcgaggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc  
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1800  
cggtctttca gcgtcatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc  
1860  
ggactcttct gcttgtcact tgtcaggaat gtgtttttac caccacaggg aaactgcgtt  
1920  
caaatcaacg tatattatg gtactgctgt gacgcggcac atacacccca gccgcacaga  
1980  
tgcgtgtgac ccagaggcga gacgcagctt tgtcctggga gacgttcata ttggaatcta  
2040  
tttaactgct aaagaacctt ttatatatat atatatatat aaatagagag atctatacag  
2100  
gtatgtctga cgggacgcag caccgtgggc acgcaccaa tagagttttt aaaagaggaa  
2160  
aaaaaactct atttggtgcg t  
2181

&lt;210&gt; 5634

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5634

```

Pro Thr Ala Ser Pro Ser Ser Trp Gln Ser Val Leu Arg Ala Trp Thr
 1           5           10           15
Leu Thr Val Arg Ser Leu Leu Asp Thr Arg Glu His Cys Leu Asn Glu
 20           25           30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
 35           40           45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
 50           55           60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
 65           70           75           80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
 85           90           95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
260          265          270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
275          280          285
Glu

```

&lt;210&gt; 5635

&lt;211&gt; 614

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5635

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nntgtgaaag atgttgcaga agtgttccag aagtggctga agatagaagg aaaaaagtgc
60
cactgcctat cagaaaaaac aaaacaaaac atgggaaata caaccaccaa attccgtaaa
120
gcactcatca atggtgatga aaacctggcc tgccaaatat atgaaaacaa tcctcagcta
180

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aaagaatctc ttgatccaaa tacatcttat ggggagccct accagcacia tactccatta  
 240  
 cattatgctg ctagacatgg aatgaataaa atattaggag atgatttcag aagagcagat  
 300  
 tgtctgcaga tgatcttaaa atggaaagga gcaaaacttg accaggggtga atatgagaga  
 360  
 gcagctattg atgctgttga taacaaaaaa aacacaccct tgcactatgc tgctgcctca  
 420  
 gggatgaaag cctgtgtaga aaaacatgga ggagacttgt ttgctgagaa tgaaaataaa  
 480  
 gatactcctt gtgattgtgc tgaaaagcaa caccacaaag atttggccct caatctggaa  
 540  
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 600  
 ttagacaaaac gaga  
 614

<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

Xaa	Val	Lys	Asp	Val	Ala	Glu	Val	Phe	Gln	Lys	Trp	Leu	Lys	Ile	Glu
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Gly	Lys	Lys	Cys	His	Cys	Leu	Ser	Glu	Lys	Thr	Lys	Gln	Asn	Met	Gly
			20					25					30		
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn
			35				40					45			
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu
	50					55					60				
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu
65					70					75				80	
His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe
				85					90					95	
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys
			100					105					110		
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn
		115					120					125			
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala
		130				135						140			
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys
145					150					155				160	
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala
				165					170					175	
Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu
			180					185					190		
Glu	Ile	Glu	Ala	Glu	Tyr	Ala	Ala	Leu	Asp	Lys	Arg				
		195					200								

<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens



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 120  
 ccaggtaactc agggccctgc cctcgtggcc ttgtccgctc gccgcgggtg gggctggcac  
 180  
 aaggcccggtt ttggaggaag tggaggctcc caggagaaag gcagtggctg tgatcgacac  
 240  
 gcccaggctc tgccctgcac tgccctggac cacgaggctg cccaccccag acagggtggga  
 300  
 cccctttccc gcatgcagac tctgagcagc agcttcctgt gacccccacc gcgtcctgct  
 360  
 cctcaggctc atgccctgcg ggaacagaag ccaagaccgc gtagaaaatc caagggtgtt  
 420  
 aaatataaat aagagcgatt cccacagccc cacggtgctg gccagcctca cagggtgccg  
 480  
 ctggttctgt gacccatccc aggcacacgc tcccctggct gggcgctgg ccagggtcc  
 540  
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 600  
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 660  
 ggagctgctg actgtgtcag agcccggctg cccagcgccc cggcgcctc cctccagctg  
 720  
 cccagcctgg gatecgtccg ctgtctgtct cctgaaccag ggagtctgac ccactcacag  
 780  
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 825

<210> 5638  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 5638  
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 1 5 10 15  
 Leu Asn Ile Asn Lys Ser Asp Ser His Ser Pro Thr Val Leu Ala Ser  
 20 25 30  
 Leu Thr Gly Ala Arg Trp Phe Cys Asp Pro Ser Gln Ala His Ala Pro  
 35 40 45  
 Leu Ala Gly Arg Leu Ala Arg Ala Pro Leu Trp Leu Ala Cys Gly Asp  
 50 55 60  
 Thr Trp Ala Leu Leu His Val Pro Thr Arg Ala Val Ala Gly Ser Lys  
 65 70 75 80  
 Glu Ala Gln Pro Arg Pro Ala Cys Val Asp Pro Ala Gly Leu Arg Ala  
 85 90 95  
 Pro Glu Leu Leu Thr Val Ser Glu Pro Gly Cys Pro Ala Pro Arg Arg  
 100 105 110  
 Pro Pro Ser Ser Cys Pro Ala Trp Asp Pro Ser Ala Val Cys Leu Leu  
 115 120 125  
 Asn Gln Gly Val

130

&lt;210&gt; 5639

&lt;211&gt; 2433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5639

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ccaacaatta ttgcagcaca taatcaatat aaacattata tatatgaaet atttgacact
120
atttgacatt tcttcttcca catccagtgt atctgacatt tagcgcacat ttgatttgca
180
ctcaccact ttgaggagct caattgccgc ttaagtcggt ggctagtggc tgccctaaag
240
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300
gcatgaccg gcctgaagta gcggcggaac ggaagtcgct tgtgtatgaa cgcagcggcg
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1380

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&lt;210&gt; 5640

&lt;211&gt; 540

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5640

Met	Cys	Pro	Ser	Pro	Glu	Arg	Gln	Glu	Asp	Gly	Ala	Arg	Lys	Asp	Phe
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Ser	Ser	Arg	Leu	Ala	Ala	Gly	Pro	Thr	Phe	Gln	His	Phe	Leu	Lys	Ser
			20					25					30		
Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser	Ser	Glu	Val	Glu	Asp	Pro	Pro
			35				40					45			
Pro	Tyr	Leu	Met	Met	Asp	Glu	Leu	Leu	Gly	Arg	Gln	Arg	Lys	Val	Tyr
			50			55					60				
Leu	Glu	Thr	Tyr	Gly	Cys	Gln	Met	Asn	Val	Asn	Asp	Thr	Glu	Ile	Ala
65					70				75					80	
Trp	Ser	Ile	Leu	Gln	Lys	Ser	Gly	Tyr	Leu	Arg	Pro	Val	Thr	Ser	Lys

85 90 95  
 Ala Asp Val Ile Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu  
 100 105 110  
 Gln Thr Ile Trp Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg  
 115 120 125  
 Arg Pro Arg Ser Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met  
 130 135 140  
 Ala Glu Arg Leu Lys Glu Glu Ile Leu Asn Arg Glu Lys Met Val Asp  
 145 150 155 160  
 Ile Leu Ala Gly Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala  
 165 170 175  
 Val Ala Glu Ser Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp  
 180 185 190  
 Glu Thr Tyr Ala Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr  
 195 200 205  
 Ser Ala Phe Val Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr  
 210 215 220  
 Cys Ile Val Pro Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala  
 225 230 235 240  
 Ser Ile Leu Glu Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu  
 245 250 255  
 Val Thr Leu Leu Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu  
 260 265 270  
 Val Gln Phe Asn Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr  
 275 280 285  
 Thr Asn Tyr Lys Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu  
 290 295 300  
 Asp Gln Val Ser Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser  
 305 310 315 320  
 Pro His Pro Lys Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu  
 325 330 335  
 Arg Asp Asn Ile Cys Lys Gln Ile His Leu Pro Ala Gln Ser Gly Ser  
 340 345 350  
 Ser Arg Val Leu Glu Ala Met Arg Arg Gly Tyr Ser Arg Glu Ala Tyr  
 355 360 365  
 Val Glu Leu Val His His Ile Arg Glu Ser Ile Pro Gly Val Ser Leu  
 370 375 380  
 Ser Ser Asp Phe Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His  
 385 390 395 400  
 Val Gln Thr Val Ser Leu Leu Arg Glu Val Gln Tyr Asn Met Gly Phe  
 405 410 415  
 Leu Phe Ala Tyr Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu  
 420 425 430  
 Lys Asp Asp Val Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu  
 435 440 445  
 Ile Thr Ile Phe Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val  
 450 455 460  
 Gly Cys Thr Gln Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala  
 465 470 475 480  
 Thr Asp Leu Cys Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro  
 485 490 495  
 Asp Ala Glu Met Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala  
 500 505 510  
 Gln Pro Gly Asp Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu

515
520
525  
 Arg His Leu Gly Asp Met Phe Ser Ala Gly Pro Leu  
530
535
540

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<210> 5641
<211> 293
<212> DNA
<213> Homo sapiens
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ttctgtggcc acgcgtccaa aaccaatcag gtcaactcgg gcgggtgtgct gctgagggtg
120
caggtgggcg aggaggtgtg gctggctggg gcacccctgg catccctgga gagccaggtg
180
aggagggcag atacaagcag aaattccagt cagtgttcac ggtcactcgg cagaccacc
240
agccccctgc acccaacagc ctgatcagat tcaacgcggg cctcaccaac ccg
293
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<210> 5642
<211> 87
<212> PRT
<213> Homo sapiens
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<400> 5642
Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val
  1          5          10          15
Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn
          20          25          30
Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu
          35          40          45
Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp
          50          55          60
Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr
65          70          75          80
Ser Pro Leu His Pro Thr Ala
          85

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<210> 5643
<211> 1218
<212> DNA
<213> Homo sapiens
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<400> 5643
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caaaataaca tggcagccag acgaattaca caggagactt ttgatgctgt attacaagaa
120
aaagccaaac gatatcacat ggatgccagt ggtgaggctg taagcgaaac tcttcagttt
180
aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc
240

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cacagcgatg gcagatactc cctcagtgga tctgtagctc actctagaga tgccggaaga  
 300  
 gaaggcctga gaagtgaagt atttccaggg ccttccttca gatcaagcaa cccttccatc  
 360  
 agtgatgaca gctacttttcg caaagaatgt ggccgggatac tggaattttc tcaactctgat  
 420  
 tctcgggacc aggtcattgg ccaccggaaa ttggggcatt tccgtttctca ggactggaaa  
 480  
 tttgcgctcc gtggttcttg ggaacaagac tttggccatc cagttttctca agagtccctc  
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 600  
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 660  
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 720  
 atcgttgacc aggaagggtc cctcctagga aagggggaga ctcagggcct gctcacagct  
 780  
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 960  
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 atcatagata agtctgatgt tttttcaaga tttgggatag aaataatcaa atgggacagga  
 1080  
 ttccacacca taaaattaga ttattaaatt tttcccaaac ttttccagac tctctttgaa  
 1140  
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 1200  
 cacagagatt ttgctttt  
 1218

&lt;210&gt; 5644

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5644

Trp	Glu	Gln	Asp	Phe	Gly	His	Pro	Val	Ser	Gln	Glu	Ser	Ser	Trp	Ser
1				5					10					15	
Gln	Glu	Tyr	Ser	Phe	Gly	Pro	Ser	Ala	Val	Leu	Gly	Asp	Phe	Gly	Ser
			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
		35					40					45			
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
	50					55					60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65					70					75				80	
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
				85					90					95	
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile



<210> 5648  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 5648  
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 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly  
 35 40 45  
 His Pro  
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<210> 5649  
 <211> 345  
 <212> DNA  
 <213> Homo sapiens

<400> 5649  
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 gaccgagtc tccggcgag cgcggggcggc ttgctccgct cgcagggtcat ccacagcggg  
 180  
 cacttcattg tgctgtcgcc gcacagcgac tcgctgcccc ggcgggcgca ccaggagggt  
 240  
 ccgtggggcc ctccgacttc gggccgcgca gtatcgaccc cacactcaca cgcctcttcg  
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 345

<210> 5650  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 5650  
 Met Ala Val Ala Ala Ala Thr Ala Trp Ser Leu Gly Ser Arg Pro Ala  
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 Gln Thr Arg Thr Arg Thr Gln Thr Arg Arg Thr Arg Val Ser Gly Ala  
 20 25 30  
 Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser  
 35 40 45  
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg  
 50 55 60  
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His  
 65 70 75 80  
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala  
 85 90 95  
 Gly Val Ser Gln



100

<210> 5651  
 <211> 615  
 <212> DNA  
 <213> Homo sapiens

<400> 5651  
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 180  
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 300  
 catacaacag aatttgagtgc gcctaagaat atgatgccgt ctagttttgc catgaagtgc  
 360  
 cgaaaacatt tgaagagtcg gagattagtc agtgcaaaac agcttggtgt ggatagaatt  
 420  
 gtagattttc aatttggaag tgatgaagct gcttaccatt taatcattga gctctatgat  
 480  
 agggggaaca ttgttcttac agattatgag tacgtaattt taaatattct aagggttcga  
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 615

<210> 5652  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 5652  
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 Leu Asn Ala Ser Leu Leu Gly Met Arg Val Asn Asn Val Tyr Asp Val  
 20 25 30  
 Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala  
 35 40 45  
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu  
 50 55 60  
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys  
 65 70 75 80  
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp  
 85 90 95  
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu  
 100 105 110  
 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu  
 115 120 125  
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

130	135	140
Val Lys Phe Ala Val Arg Glu Arg Tyr Pro Leu Asp His Ala Arg Ala		
145	150	155
Ala Glu Pro		160

<210> 5653  
 <211> 1439  
 <212> DNA  
 <213> Homo sapiens

<400> 5653  
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 120  
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 gttgaatctg atcaggctgt tgggtgcagg gggctgggtg gtctgccgag tgaccactca  
 240  
 gacaccgtgt cctcttgccct gggagagggg aagcagatct gaggacatct ctgtgccagg  
 300  
 ccagaaaccg cccacctgca ggtgaggccc ggaccctgc ccagttcctt ctccgggatg  
 360  
 gacgtggggc ccagctccct gccccacctt gggctgaagc tgctgctgct cctgctgctg  
 420  
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 480  
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 540  
 atcccagcca ttcccgggat ccgaggaccc aaagggcaga agggagaacc cggcttacct  
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 660  
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 720  
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 780  
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 gtccccggcc tctactactt tgtctaccac gcgtcgcata cagccaacct gtgcgtgctg  
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 960  
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 aatgactact acgacatggg gggcatccag ggctctgaca gcgtcttctc cggcttctctg  
 1080  
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 1200  
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 1320  
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<210> 5654  
 <211> 245  
 <212> PRT  
 <213> Homo sapiens

<400> 5654  
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                   20                  25                  30  
 Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp  
           35                  40                  45  
 Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala  
   50                  55                  60  
 Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu  
 65                  70                  75                  80  
 Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro  
                   85                  90                  95  
 Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly  
                   100                  105                  110  
 Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr  
           115                  120                  125  
 His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu  
   130                  135                  140  
 Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys  
 145                  150                  155                  160  
 Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala  
                   165                  170                  175  
 Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe  
                   180                  185                  190  
 Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu  
           195                  200                  205  
 Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr  
   210                  215                  220  
 Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe  
 225                  230                  235                  240  
 Leu Leu Phe Pro Asp  
                   245

<210> 5655  
 <211> 3810  
 <212> DNA  
 <213> Homo sapiens

<400> 5655  
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aagtacatgg aagtccatga gaaggcctcc ttcaccaata gtgagctgca ccgtgccatg  
180  
aacctgcacg tcggcaacct gcgcctgctc agcggggccgc ttgaccagggt ccgggctgcc  
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300  
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360  
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420  
aagttgttcg aggagcagct gaaaaagtat gaccagctga aggtgtacct ggagcagaac  
480  
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540  
gtgcccgggg tactcagcga cttggaccaa aagtggaact ccacgctgca gaccctggtg  
600  
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660  
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720  
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780  
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840  
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960  
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1020  
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1080  
gcctctacc cagcccctgc ctacacaccg gagctgggce ttgtgccccg atcctcccca  
1140  
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1200  
ctcccctcgg cccacctcc tcaattctca ggccccgagt tggccatggc ggttcggcca  
1260  
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&lt;210&gt; 5656

&lt;211&gt; 987

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5656

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Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala

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Glu Ser Glu Ala Val Glu Ala Gly Asp Pro Pro Glu Glu Leu Arg Ser
          275          280          285
Leu Pro Pro Asp Met Val Ala Gly Pro Arg Leu Pro Asp Thr Phe Leu
          290          295          300
Gly Ser Ala Thr Pro Leu His Phe Pro Pro Ser Pro Phe Pro Ser Ser
305          310          315          320
Thr Gly Pro Gly Pro His Tyr Leu Ser Gly Pro Leu Pro Pro Gly Thr
          325          330          335
Tyr Ser Gly Pro Thr Gln Leu Ile Gln Pro Arg Ala Pro Gly Pro His
          340          345          350
Ala Met Pro Val Ala Pro Gly Pro Ala Leu Tyr Pro Ala Pro Ala Tyr
          355          360          365
Thr Pro Glu Leu Gly Leu Val Pro Arg Ser Ser Pro Gln His Gly Val
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Val Ser Ser Pro Tyr Val Gly Val Gly Pro Ala Pro Pro Val Ala Gly
385          390          395          400
Leu Pro Ser Ala Pro Pro Pro Gln Phe Ser Gly Pro Glu Leu Ala Met
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Ala Val Arg Pro Ala Thr Thr Thr Val Asp Ser Ile Gln Ala Pro Ile
          420          425          430
Pro Ser His Thr Ala Pro Arg Pro Asn Pro Thr Pro Ala Pro Pro Pro
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Pro Cys Phe Pro Val Pro Pro Pro Gln Pro Leu Pro Thr Pro Tyr Thr
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Tyr Pro Ala Gly Ala Lys Gln Pro Ile Pro Ala Gln His His Phe Ser
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Ser Gly Ile Pro Thr Gly Phe Pro Ala Pro Arg Ile Gly Pro Gln Pro
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Gln Pro His Pro Gln Pro His Pro Ser Gln Ala Phe Gly Pro Gln Pro
          500          505          510
Pro Gln Gln Pro Leu Pro Leu Gln His Pro His Leu Phe Pro Pro Gln
          515          520          525
Ala Pro Gly Leu Leu Pro Pro Gln Ser Pro Tyr Pro Tyr Ala Pro Gln
          530          535          540
Pro Gly Val Leu Gly Gln Pro Pro Pro Pro Leu His Thr Gln Leu Tyr
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Pro Gly Pro Ala Gln Asp Pro Leu Pro Ala His Ser Gly Ala Leu Pro
          565          570          575
Phe Pro Ser Pro Gly Pro Pro Gln Pro Pro His Pro Pro Leu Ala Tyr
          580          585          590
Gly Pro Ala Pro Ser Thr Arg Pro Met Gly Pro Gln Ala Ala Pro Leu
          595          600          605
Thr Ile Arg Gly Pro Ser Ser Ala Gly Gln Ser Thr Pro Ser Pro His
          610          615          620
Leu Val Pro Ser Pro Ala Pro Ser Pro Gly Pro Gly Pro Val Pro Pro
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Ala Ala Asp Leu Leu Ser Ser Ser Pro Glu Ser Gln His Gly Gly Thr

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&lt;210&gt; 5657

&lt;211&gt; 1020

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5657

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&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5658

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Lys	Asp	Met	Val	Asp	Pro	Val	Thr	Gly	Asp	Lys	Leu	Thr	Asp	Arg	Asp
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Ile	Ile	Val	Leu	Gln	Arg	Gly	Gly	Thr	Gly	Phe	Ala	Gly	Ser	Gly	Val
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&lt;210&gt; 5659

&lt;211&gt; 1263

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5659

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 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln  
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 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys  
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 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr  
 100 105 110  
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 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His  
 195 200 205  
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile  
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 Thr Gly Pro Asp Leu Pro His Pro Gly Pro Asp Gly His Leu Asp Thr  
 50 55 60  
 His Ser Gly Leu Ser Ser Asn Ser Ser Met Thr Thr Arg Glu Leu Gln  
 65 70 75 80  
 Gln Tyr Trp Gln Asn Gln Lys Cys Arg Trp Lys His Val Lys Leu Leu  
 85 90 95  
 Phe Glu Ile Ala Ser Ala Arg Ile Glu Glu Arg Lys Val Ser Lys Phe  
 100 105 110  
 Val Met Gly Lys Ser Arg Pro Gly Glu Met Thr Tyr Pro Gly Ser Arg  
 115 120 125  
 Gly Glu Thr Gly Thr Ala Pro Glu Pro Asp Pro Arg Cys Pro Arg Gln  
 130 135 140  
 Ser Asp Met Leu

145

<210> 5663  
 <211> 857  
 <212> DNA  
 <213> Homo sapiens

<400> 5663  
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 120  
 agacaggagg ctgccgtggt caagaagggc caagccttga agtctcacgg caccctctgt  
 180  
 ggtggaggta taaggctcag gggccaacta ctgggtcttg cagtcccat cggtgctgtg  
 240  
 ggctgtcttc accttcttta gtccctcttg tagctcagac tcggccacca caacctcctt  
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 tggcttctgg taagagatga tcagggtgca gttggcgtgg gcaaagctca gcaaggcgtc  
 360  
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 gttggttgtt ctgacaatga tgcagcgctc cttctggtcc acagagacac tatagacatc  
 480  
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 540  
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 660  
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 720  
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 840  
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 857

<210> 5664  
 <211> 203  
 <212> PRT  
 <213> Homo sapiens

<400> 5664  
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 20 25 30  
 Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu  
 35 40 45  
 Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp  
 50 55 60  
 Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

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65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
          85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
          100          105          110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
          115          120          125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
          130          135          140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
145          150          155          160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
          165          170          175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
          180          185          190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
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<210> 5665  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

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<400> 5665
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cccgggcctt cccgcaggt ggagcgctg tcgcacccgc tgctgcagca gcagtatgag
360
ctgtaccggg agcgctgtgt gcagcgatgc gagcggcgcc cggaggagca ggtgctgtac
420
cacggcacga cggcaccggc agtgccctgac atctgcgccc acggcttcaa ccgcagcttc
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531

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<210> 5666  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

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<400> 5666
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1          5          10          15
Leu Gln Gln Gln Tyr Glu Leu Tyr Arg Glu Arg Leu Leu Gln Arg Cys
          20          25          30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

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```

          35          40          45
Ala Val Pro Asp Ile Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly
      50          55          60
Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg
65          70          75

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<210> 5667  
 <211> 858  
 <212> DNA  
 <213> Homo sapiens

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<400> 5667
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120
tttgagaagt taagaatgat ttccaaggaa atccgccaag ttgttcgaat gacttctgct
180
aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaaattca
240
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300
aatgccaaaga agctatatga ggatgcccac atggcaagga aggtgaagca gtatctttcc
360
agtctcgatg tagagacaga tgaggagaag ttccagatga tgtcattaca gntggagcct
420
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480
aaaaaacttat ttctctagaa ttatacctaa gtcccaagaa aattaacttt cactcacaaa
540
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600
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720
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858

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<210> 5668  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

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<400> 5668
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1          5          10          15
Phe Pro Val Val Lys Lys Asp Met Thr Phe Leu His Glu Gly Asn Asp
      20          25          30
Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

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<400> 5669
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120
gccatgatgc gcagctccat agagaggggc aaatgggtct tcttccagaa ctgccacctg
180
gcaccaagct ggatgccagc cctagaacgc ctcctcgagc acatcaaccc cgacaaggta
240
cacaggggact tccgcctctg gctcaccagc ctgccagca acaagttccc agtgtccatc
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480
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960

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 1080  
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&lt;210&gt; 5670

&lt;211&gt; 591

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5670

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Ala	Glu	Glu	Met	Lys	Phe	Ser	Lys	Lys	Leu	Ser	Ala	Ile	Ser	Leu	Gly
			20					25					30		
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
		35					40					45			
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
	50					55					60				
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
65					70					75				80	
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
			85					90					95		
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
		100					105						110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
	115					120						125			
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

	130					135					140					
Leu 145	Ser	Leu	Cys	Leu	Phe 150	His	Gly	Asn	Ala	Leu 155	Glu	Arg	Arg	Lys	Phe 160	
Gly	Pro	Leu	Gly	Phe 165	Asn	Ile	Pro	Tyr	Glu 170	Phe	Thr	Asp	Gly	Asp	Leu 175	
Arg	Ile	Cys	Ile	Ser 180	Gln	Leu	Lys	Met	Phe 185	Leu	Asp	Glu	Tyr	Asp	Asp 190	
Ile	Pro	Tyr	Lys	Val 195	Leu	Lys	Tyr	Thr	Ala 200	Gly	Glu	Ile	Asn	Tyr	Gly 205	
Gly	Arg	Val	Thr	Asp 210	Asp	Trp	Asp	Arg	Arg 215	Cys	Ile	Met	Asn	Ile	Leu 220	
Glu 225	Asp	Phe	Tyr	Asn 230	Pro	Asp	Val	Leu	Ser 235	Pro	Glu	His	Ser	Tyr	Ser 240	
Ala	Ser	Gly	Ile	Tyr 245	His	Gln	Ile	Pro	Pro 250	Thr	Tyr	Asp	Leu	His	Gly 255	
Tyr	Leu	Ser	Tyr	Ile 260	Lys	Ser	Leu	Pro	Leu 265	Asn	Asp	Met	Pro	Glu	Ile 270	
Phe	Gly	Leu	His	Asp 275	Asn	Ala	Asn	Ile	Thr 280	Phe	Ala	Gln	Asn	Glu	Thr 285	
Phe	Ala	Leu	Leu	Gly 290	Thr	Ile	Ile	Gln	Leu 295	Gln	Pro	Lys	Ser	Ser	Ser 300	
Ala 305	Gly	Ser	Gln	Gly 310	Arg	Glu	Glu	Ile	Val 315	Glu	Asp	Val	Thr	Gln	Asn 320	
Ile	Leu	Leu	Lys	Val 325	Pro	Glu	Pro	Ile	Asn 330	Leu	Gln	Trp	Val	Met	Ala 335	
Lys	Tyr	Pro	Val	Leu 340	Tyr	Glu	Glu	Ser	Met 345	Asn	Thr	Val	Leu	Val	Gln 350	
Glu	Val	Ile	Arg	Tyr 355	Asn	Arg	Leu	Leu	Gln 360	Val	Ile	Thr	Gln	Thr	Leu 365	
Gln	Asp	Leu	Leu	Lys 370	Ala	Leu	Lys	Gly	Leu 375	Val	Val	Met	Ser	Ser	Gln 380	
Leu 385	Glu	Leu	Met	Ala 390	Ala	Ser	Leu	Tyr	Asn 395	Asn	Thr	Val	Pro	Glu	Leu 400	
Trp	Ser	Ala	Lys	Ala 405	Tyr	Pro	Ser	Leu	Lys 410	Pro	Leu	Ser	Ser	Trp	Val 415	
Met	Asp	Leu	Leu	Gln 420	Arg	Leu	Asp	Phe	Leu 425	Gln	Ala	Trp	Ile	Gln	Asp 430	
Gly	Ile	Pro	Ala	Val 435	Phe	Trp	Ile	Ser	Gly 440	Phe	Phe	Phe	Pro	Gln	Ala 445	
Phe	Leu	Thr	Gly	Thr 450	Leu	Gln	Asn	Phe	Ala 455	Arg	Lys	Phe	Val	Ile	Ser 460	
Ile 465	Asp	Thr	Ile	Ser 470	Phe	Asp	Phe	Lys	Val 475	Met	Phe	Glu	Ala	Pro	Ser 480	
Glu	Leu	Thr	Gln	Arg 485	Pro	Gln	Val	Gly	Cys 490	Tyr	Ile	His	Gly	Leu	Phe 495	
Leu	Glu	Gly	Ala	Arg 500	Trp	Asp	Pro	Glu	Ala 505	Phe	Gln	Leu	Ala	Glu	Ser 510	
Gln	Pro	Lys	Glu	Leu 515	Tyr	Thr	Glu	Met	Ala 520	Val	Ile	Trp	Leu	Leu	Pro 525	
Thr	Pro	Asn	Arg	Lys 530	Ala	Gln	Asp	Gln	Asp 535	Phe	Tyr	Leu	Cys	Pro	Ile 540	
Tyr 545	Lys	Thr	Leu	Thr 550	Arg	Ala	Gly	Thr	Leu 555	Ser	Thr	Thr	Gly	His	Ser 560	
Thr	Asn	Tyr	Val	Ile	Ala	Val	Glu	Ile	Pro	Thr	His	Gln	Pro	Gln	Arg	

BNSDOCID: <WO 0058473A2 | >

Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys  
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 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro  
                     100                    105                    110  
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly  
                     115                    120                    125  
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val  
                     130                    135                    140  
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp  
 145                    150                    155                    160  
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro  
                     165                    170                    175  
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu  
                     180                    185                    190  
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala  
                     195                    200                    205  
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly  
                     210                    215                    220

&lt;210&gt; 5673

&lt;211&gt; 1279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5673

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 ccgagacgat aaaagaacag ttgggtgttt ataggatgcc ctcaaagtga gctggctaag  
 180  
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 300  
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 1279

&lt;210&gt; 5674

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5674

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Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
			20					25					30		
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
			35				40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55					60				
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
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Gln															

&lt;210&gt; 5675

&lt;211&gt; 1074

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5675

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 180  
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 1074

&lt;210&gt; 5676

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5676

Glu	Val	Thr	Val	Leu	Cys	Thr	Gly	Leu	Ser	Leu	Ser	Ile	Gly	Met	Thr
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Ala	Thr	Ser	Gln	Gly	Cys	Arg	Ala	Gly	Gly	Arg	Cys	Gly	Trp	Ala	Cys
			20					25					30		
Ala	Cys	Phe	Arg	Arg	Gln	Gln	Asn	Arg	Thr	Gln	Pro	Ala	Val	Thr	Pro
		35					40					45			
His	Ser	Arg	Ser	Arg	Arg	Thr	Ala	Ser	Arg	Met	Ser	Leu	Gly	Glu	Gln
	50					55					60				
Gly	Ser	Thr	Thr	Gly	Leu	Thr	Leu	Gly	His	Arg	Ala	Pro	Ala	Pro	Trp
65					70					75					80
Gly	Met	Ser	Trp	His	Asn	His	Arg	Arg	Gln	Val	Asn	Arg	Ile	Lys	Ser
				85					90					95	
Arg	Gln	Cys	Leu	Ser	Met	Ser	Glu	Thr	Ala	Val	Ala	Arg	Ala	Trp	Pro
			100					105					110		
Arg	Ala	Ala	Gly	Pro	Ala	Leu	Ala	Ile	Ser	Pro	Gly	Leu	Ala	Arg	Gly
		115				120						125			
Gly	Leu	Gly	Leu	Thr	Pro	Arg	Thr	Arg	Cys	Pro	Gln	Arg	Val	Pro	His
	130					135						140			
Cys															
145															

&lt;210&gt; 5677

&lt;211&gt; 477

<212> DNA  
<213> Homo sapiens

<400> 5677  
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120  
agggaaagca agatgcagca gtgaggccct ctctggtatc cattcattca cttcactcaa  
180  
cagctgttta tgaccatgag caatacaagc cttgtgaaga tcttgaggca gggcacaagc  
240  
cgctgacgtc tgctccagtg agaagccctg ctgccttccc caattcgctt tctttccgca  
300  
gccgccgctg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca  
360  
ccagctggag aagaccacca atgctgagat gaggaggtg ctggctgagc tgctggagct  
420  
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477

<210> 5678  
<211> 151  
<212> PRT  
<213> Homo sapiens

<400> 5678  
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1 5 10 15  
Ala Ser Thr Ser Leu Ile Ser Ala Leu Val Val Phe Ser Ser Trp Cys  
20 25 30  
Met Glu Trp Thr Ser Arg Tyr Phe His Met Gln Ile Arg Gly Arg Gly  
35 40 45  
Ser Gly Gly Cys Gly Lys Lys Ala Asn Trp Gly Arg Gln Gln Gly Phe  
50 55 60  
Ser Leu Glu Gln Thr Ser Ala Ala Cys Ala Leu Leu Gln Asp Leu His  
65 70 75 80  
Lys Ala Cys Ile Ala His Gly His Lys Gln Leu Leu Ser Glu Val Asn  
85 90 95  
Glu Trp Ile Pro Glu Arg Ala Ser Leu Leu His Leu Ala Phe Pro Thr  
100 105 110  
Ser Asn Pro Leu Gly Gln Arg Gly Gly Val Leu Pro Leu Leu His Gln  
115 120 125  
Cys Pro Phe Leu Pro Trp Ser Gln Ala Ala Ser Phe Gln His Arg Pro  
130 135 140  
Leu Gln Arg Gly Thr Ala Ala  
145 150

<210> 5679  
<211> 665  
<212> DNA  
<213> Homo sapiens

<400> 5679

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 120  
 tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca  
 180  
 ccacagcagc ctagtctctga atccacacca cagcagccta gccctgaatc cacaccacag  
 240  
 cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcacccgaa  
 300  
 atccgcgcgt cctcttgctg ccttttatct ccagatgcta acgtgaaggc agccctcaa  
 360  
 tccaggaaaag cagaaaatct tcaagaaaac cctccagtca tcgtaacgcg tgcctccaa  
 420  
 gccctcgaa ctgtggctgt ggctctgggg gctctaggag ctgcctacta catcactgaa  
 480  
 tccttgtaga caagccccta ggcccacagt ctggcagacc tccaccagcc ccaggagttg  
 540  
 ataggtgatg gcgctgggag aagatgttca gaatatctca aaagccaagt ccagaagatc  
 600  
 cagtttccat caaagggacc tctcttgctc ccaaaattta aaaaaagaaa aaaaaaacga  
 660  
 aaaaa  
 665

<210> 5680  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 5680  
 Val Gly Arg Ile Tyr His Glu Glu Gly Gln Glu Glu Lys Val Arg Gly  
 1 5 10 15  
 Gln Thr Pro Pro Asp Ser Thr Ser Gln His Ala Gly Ser Asn Ser Thr  
 20 25 30  
 Ser Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln Gln Pro Ser Pro Glu  
 35 40 45  
 Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His Ser Ser  
 50 55 60  
 Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro Ala Pro  
 65 70 75 80  
 Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala Asn Val  
 85 90 95  
 Lys Ala Ala Pro Gln Ser Arg Lys Ala Glu Asn Leu Gln Glu Asn Pro  
 100 105 110  
 Pro Val Ile Val Thr Arg Val Leu Gln Ala Leu Gly Thr Val Ala Val  
 115 120 125  
 Ala Leu Gly Ala Leu Gly Ala Ala Tyr Tyr Ile Thr Glu Ser Leu  
 130 135 140

<210> 5681  
 <211> 1402  
 <212> DNA  
 <213> Homo sapiens



<400> 5681  
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 120  
 tagacattga tggaagcaga aaccaaaact cttcccctgg agaatgcac catcctttca  
 180  
 gagggctctc tgcaggaagg acaccgatta tggattggca acctggaccc caaaattacc  
 240  
 gaataccacc tcctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc  
 300  
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 360  
 actaagcagg aagcagagca agccatccag tgtctcaatg gcaagttggc cctgtccaag  
 420  
 aagctggtgg tgcgatgggc acatgctcaa gtaaagagat atgatcataa caagaatgat  
 480  
 aagattcttc caatcagtct cgagccatcc tcaagcactg agcctactca gtctaacct  
 540  
 agtgtcactg caaagataaa agccattgaa gcaaaactga aaatgatggc ggaaaatcct  
 600  
 gatgcagagt atccagcagc gcctgtttat tcctacttta agccaccaga taaaaaagg  
 660  
 actactccat attctagaac agcatggaaa tctcgaagat gatggttgtg aattactgta  
 720  
 gcagcaaaaag caaattggtc tccacacctt aaatcgtctg cctgtgtact ttgtagatgt  
 780  
 gaatgggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg  
 840  
 gatgttctta tggatgtttc ttccctaaac tatgtatgga attgagcatc atccagaata  
 900  
 aatagcgttg tatcccaa at tgtgatttga accctgggat gctctaattg gctggttggt  
 960  
 ttggatttgt aactccagaa acattctata gtgtgccaga gcaaaaggca aatacacaaa  
 1020  
 atattattta aatcaggaaa ctaaaaatat taacatctat taaaaaattg agcatttttc  
 1080  
 tacgtcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgagag  
 1140  
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 1200  
 ctggactgaa aaagagaaag ttcttgga aaaggagctg attctttgaa caaatgttgt  
 1260  
 agtaatctgt ttaagaatta tgcttattgt ttcaaaatcc caactaggaa aacatggtgt  
 1320  
 atatcttaaa attgtttgtg ttgacaaaac tagaatcaaa ttaaacattt tataccacat  
 1380  
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 1402

&lt;210&gt; 5682

&lt;211&gt; 190

&lt;212&gt; PRT

<213> Homo sapiens

<400> 5682

```

Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu
 1           5           10           15
Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
      20           25           30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
      35           40           45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
      50           55           60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
65           70           75           80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
      85           90           95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
      100          105          110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
      115          120          125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
      130          135          140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
145          150          155          160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
      165          170          175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
      180          185          190

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<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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ggatccatgc gttgccttag ggaggcctca gctgtcaagc actgaccatc tctgcagaca
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cgcagggctg acctgtactg gtgagtaagc attagccatg ggacgcacac aatccagcca
120
atgctttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tggttaaaag tagggaaata cagtgttcca gggcatagga atggtgctct
240
gggtagaaaa gtttattttg ctggtgggag gcaggttttg ttaataaagc tttgaaatac
300
acaaatttca ttctggatgc tgatgctg
328

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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

```

Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

```

```

      1             5             10             15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20             25             30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35             40             45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50             55             60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65             70             75             80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85             90             95
Ser Leu Gly Gln Arg Met Asp
      100

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<210> 5685  
 <211> 604  
 <212> DNA  
 <213> Homo sapiens

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<400> 5685
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ctggcctacg agtctgacgg gatcgtggtt tccaacgaca cataccgtga cctccaaggc
120
gagcggcagg agtggaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggcctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtgga gctgggggct gggctctgcg gggcctgtg gccatgggag
300
gttgcgggtc ttggctccag gcagctttga gaggtagacg gatagctcac cacataggag
360
aatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatggttc cagggtggcct ctctacgaac
480
caacatggca tctctcgagc agaggccatg ggccagtggg tgcgggctgc catccccga
540
cgacttcagg gagggagttc ccctaaaggt gcccatgggc tgtggccctc tagaccgggg
600
atcc
604

```

<210> 5686  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

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<400> 5686
Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
      1             5             10             15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20             25             30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

```

35 40 45  
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val  
 50 55 60  
 Pro Ser Gln Arg Pro  
 65

<210> 5687

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5687

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 ccccggtctct gcatgcacgc ctgcgtgaac accccgggct cttcccgttg cacctgcccc  
 120  
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc  
 180  
 ctgcagccgg tgtgccccca ggggaccaca tgcataca cgggtggaag cttccagtgt  
 240  
 gtcagccctg agtgccccga gggcagcggc aatgtgagct acgtgaagac gtctccattc  
 300  
 cagtgtgagc ggaaccctg ccccatgg  
 328

<210> 5688

<211> 109

<212> PRT

<213> Homo sapiens

<400> 5688

Thr Leu Ser Arg Pro Arg Gly Ala Gly Lys Gly Gly Gly Asp Gly Gly  
 1 5 10 15  
 Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro  
 20 25 30  
 Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp  
 35 40 45  
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val  
 50 55 60  
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys  
 65 70 75 80  
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys  
 85 90 95  
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met  
 100 105

<210> 5689

<211> 1897

<212> DNA

<213> Homo sapiens

<400> 5689

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tgaacaatca gaatcataga agagtgtgag cactggtcct ttgtcttcca ggtgggacag  
120  
tgtgtggtgg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac  
180  
tctcgcccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta  
240  
ccgctctcag tctccagtaa gaagcatgga tgaagctcct tgtgttaacg gccgctgggg  
300  
aacactgaga cccagggtc aaaggcagac tcctcagggt cccgggaagg gagcctttcc  
360  
ccagccagag gagacggctc tcctatcctc aatgggtggga gtttgtctcc aggaacggca  
420  
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct  
480  
gctgctgaag gatacgacct gaaaatagga ctttctttgg ccccccgcag aggatcaacc  
540  
agatcagaaa gatctgagat taggatccat agatctgaat tgggatctaa acccgcttcc  
600  
agtagtaatc ccatggatgg catggacaat aggacagttg ggggaagtat gagacaccct  
660  
cctgaacaga caaatggtgt gcatacccca cctcacgtgg ccagtgcctt tgcagggggc  
720  
gtctccccag gtgccctgcg tcggagtctg gaagccatca aagcgatgtc ctccaaaggc  
780  
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840  
cagagtttga gcagtggaga aacagtgcct atccctcgcc cagggcctgc ccaaggagat  
900  
ggacattcct tacctcccat tgctcgccgc ctggggccacc accctccaca gtcctaaat  
960  
gttggcaaac ccctatacca gagtatgaac tgcaagccca tgcagatgta cgtgctggac  
1020  
attaaagaca ccaaggagaa ggggcgggtc aaatggaaag tatttaatag cagttctgtg  
1080  
gttggacctc ctgaaaccag cctgcatacc gtggtacaag gcaggggtga actcatcata  
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1260  
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1320  
cagaagccaa aactctttta ttcccaaccg aagtcactcc aggtctgggat caaatctcca  
1380  
ttaagaaaaa aaattatata taaatatata tatatatatt atatagccaa ctctgttgac  
1440  
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1500  
gctgggctgc ctttttctac cttgctggta actagaccaa gaagttagag aatagactaa  
1560  
catcagtaac ttcccaaaag aaactgaaga gcccctgta aatctttatg tggccttctt  
1620  
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1680

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 1800  
 gaaagttacc caacaaagga ttttattcca catttggtgtg ccgggtcatt gtgaaataat  
 1860  
 gtttatgcag ccaacatctg aaaaaaaaaa aaaaaaa  
 1897

<210> 5690

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5690

Thr	Ile	Arg	Ile	Ile	Glu	Glu	Cys	Glu	His	Trp	Ser	Phe	Val	Phe	Gln
1			5					10					15		
Val	Gly	Gln	Cys	Val	Val	Val	Phe	Ser	Gln	Ala	Pro	Ser	Gly	Arg	Ala
		20					25					30			
Pro	Leu	Ser	Pro	Ser	Leu	Asn	Ser	Arg	Pro	Ser	Pro	Ile	Ser	Ala	Thr
		35				40						45			
Xaa	Ser	Ser	Ser	Arg	Ser										
		50													

<210> 5691

<211> 1227

<212> DNA

<213> Homo sapiens

<400> 5691

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 120  
 catcaaaacg aggacgaacc cattcgtgtt agctaccatc ggaatatcca ctataattca  
 180  
 gtggtgaatc ctaacaaggc caccattggt gtggggctgg gctgccatca ttcaaaccag  
 240  
 ggtttgcaga gcagtctctg atgaagaatg ccataaaaac atcggaggag tcatggattg  
 300  
 aacagcagat gctagaagac aagaaacggg ccacagactg ggaggccaca aatgaagcca  
 360  
 tcgaggagca ggtggctcgg gaatcctacc tgcagtgggt gcgggatcag gagaaacagg  
 420  
 ctgcgcaggt ccgaggcccc agccagcccc ggaaagccag cgccacatgc agttcggcca  
 480  
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 caggcactgt tttagctctt gccaaacctc cttcgccttg tgcgccaggt acaagcagtc  
 660  
 agttctcggc aggggcccag cgggcaactt ccccccttgt gtccctctac cctgctttgg  
 720

agtgccgggc cctcattcag cagatgtccc cctctgcctt tggctctgaat gactgggatg  
 780  
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 840  
 agaaaaacaa agtgcacaga gacccgcccc cagacaagag ttgatggaga cccagggatt  
 900  
 ggacaccate tcccaacccc agggattcgg gcaaggggtgc cgaagataga caagaggcac  
 960  
 acagagacag accaactggc agccaggcag cccagagga gagagacatt cagacagagg  
 1020  
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 1080  
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 1200  
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<210> 5692

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5692

Lys	Arg	Lys	Asn	Asn	Cys	His	Gly	Asn	His	Ile	Glu	Met	Gln	Ala	Met
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Ala	Glu	Met	Tyr	Asn	Arg	Pro	Val	Glu	Val	Tyr	Gln	Tyr	Ser	Thr	Glu
			20					25					30		
Pro	Ile	Asn	Thr	Phe	His	Gly	Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile
		35					40					45			
Arg	Val	Ser	Tyr	His	Arg	Asn	Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro
	50					55					60				
Asn	Lys	Ala	Thr	Ile	Gly	Val	Gly	Leu	Gly	Cys	His	His	Ser	Asn	Gln
65					70				75						80
Gly	Leu	Gln	Ser	Ser	Leu										
					85										

<210> 5693

<211> 389

<212> DNA

<213> Homo sapiens

<400> 5693

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 gacactgggg cacctctgcg cctgtcccaa ggccacgctg gctctcttca ggcccatggc  
 120  
 tccaaccccc cagggcccct cgtcggggcg tccaactta gtcgtcccct gacgcggcct  
 180  
 ctggggccctc ccgggttggg gagctgacgg cagcttcccc ccacaggtgc ctctgagcct  
 240  
 cggaacatga tctacatgag ccgcttgggt atctggggcg agggcacacc cttccggaac  
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tttgaggagt tctgcacgc catcgagaag aggggcgttg ggcctatgga gatcgtggcc  
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 389

<210> 5694  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 5694  
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 Met Ser Arg Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Asn Phe  
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 Glu Glu Phe Leu His Ala Ile Glu Lys Arg Gly Val Gly Ala Met Glu  
 35 40 45  
 Ile Val Ala Met Asp Met Lys Val Ser Gly His Val  
 50 55 60

<210> 5695  
 <211> 1417  
 <212> DNA  
 <213> Homo sapiens

<400> 5695  
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 cccccagata gggggactga tggcaaggcc cagctgggtg tgcactcggc ctttgagcag  
 180  
 gatgtggagg agctggaccg ggcgctcagg gctgccttgg aggtccacgt ccaggaggag  
 240  
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 300  
 catggtgtga gtgttgccct gcgtggtgac tgcaccatcc tccgtggcct cggggcccac  
 360  
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 420  
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 480  
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 540  
 tacgacaccc tggacgtgc ccgcagcagc atccgcgtcg ttcgtgtgga gcgctgtcg  
 600  
 caccgcgtgc tgcagcagca gtatgagctg taccgggagc gcctgctgca gcgatgagag  
 660  
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 720  
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 780  
 gtgtatttctg ccaggcgcgc ctccctgtcg gtgcaggacc gctactcgcc ccccaacgcc  
 840



gatggccata aggcggtggt cgtggcacgg gtgctgactg gcgactacgg gcagggccgc  
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&lt;210&gt; 5696

&lt;211&gt; 368

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5696

Val	Ala	Leu	His	Arg	Ser	Leu	Lys	Pro	Gln	Gly	Gln	Val	Gly	Glu	Gln
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Glu	Glu	Ala	Gly	Ala	Leu	Arg	Gln	Ala	Leu	Thr	Phe	Ser	Leu	Leu	Glu
		20						25					30		
Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
		35					40					45			
Lys	Ala	Gln	Leu	Val	Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu	Glu
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Leu	Asp	Arg	Ala	Leu	Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu	Glu
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Thr	Val	Gly	Pro	Trp	Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala	Arg
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Leu	Glu	Arg	Cys	His	Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys	Thr
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Ile	Leu	Arg	Gly	Phe	Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His	Leu
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			165					170					175		
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	180							185					190		
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210	215	220
Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro Ala Val Pro Asp Ile		
225	230	235
Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val		240
	245	250
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln		255
	260	265
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		270
	275	280
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg		285
	290	295
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser		300
305	310	315
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		320
	325	330
Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg		335
	340	345
Ala Ser Pro Asp Asp Pro Ser Gly Leu Pro Gly Arg Ser Pro Asp Thr		350
	355	360
		365

&lt;210&gt; 5697

&lt;211&gt; 3362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5697

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 3360  
 gt  
 3362

&lt;210&gt; 5698

&lt;211&gt; 403

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5698

Met	Phe	Val	Ala	Ser	Glu	Arg	Lys	Met	Arg	Ala	His	Gln	Val	Leu	Thr
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Phe	Leu	Leu	Leu	Phe	Val	Ile	Thr	Ser	Val	Ala	Ser	Glu	Asn	Ala	Ser
			20					25					30		
Thr	Ser	Arg	Gly	Cys	Gly	Leu	Asp	Leu	Leu	Pro	Gln	Tyr	Val	Ser	Leu
			35				40					45			
Cys	Asp	Leu	Asp	Ala	Ile	Trp	Gly	Ile	Val	Val	Glu	Ala	Val	Ala	Gly
	50					55					60				
Ala	Gly	Ala	Leu	Ile	Thr	Leu	Leu	Leu	Met	Leu	Ile	Leu	Leu	Val	Arg
65					70				75					80	
Leu	Pro	Phe	Ile	Lys	Glu	Lys	Glu	Lys	Lys	Ser	Pro	Val	Gly	Leu	His
				85				90						95	
Phe	Leu	Phe	Leu	Leu	Gly	Thr	Leu	Gly	Leu	Phe	Gly	Leu	Thr	Phe	Ala
			100					105					110		
Phe	Ile	Ile	Gln	Glu	Asp	Glu	Thr	Ile	Cys	Ser	Val	Arg	Arg	Phe	Leu
	115					120						125			
Trp	Gly	Val	Leu	Phe	Ala	Leu	Cys	Phe	Ser	Cys	Leu	Leu	Ser	Gln	Ala

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Gln Leu Val Gly Leu Ala Leu Cys Leu Met Leu Val Gln Val Ile Ile
      165              170              175
Ala Val Glu Trp Leu Val Leu Thr Val Leu Arg Asp Thr Arg Pro Ala
      180              185              190
Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met
      195              200              205
Val Leu Leu Val Val Thr Leu Gly Leu Ala Leu Phe Thr Leu Cys Gly
      210              215              220
Lys Phe Lys Arg Trp Lys Leu Asn Gly Ala Phe Leu Leu Ile Thr Ala
225              230              235              240
Phe Leu Ser Val Leu Ile Trp Val Ala Trp Met Thr Met Tyr Leu Phe
      245              250              255
Gly Asn Val Lys Leu Gln Gln Gly Asp Ala Trp Asn Asp Pro Thr Leu
      260              265              270
Ala Ile Thr Leu Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala
      275              280              285
Ile Pro Glu Ile His Cys Thr Leu Leu Pro Ala Leu Gln Glu Asn Thr
      290              295              300
Pro Asn Tyr Phe Asp Thr Ser Gln Pro Arg Met Arg Glu Thr Ala Phe
305              310              315              320
Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe
      325              330              335
Ser Met Asp Glu His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn
      340              345              350
Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser
      355              360              365
Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val
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Leu Asn Gly Gly Thr Ile Pro Thr Ala Pro Pro Ser His Thr Gly Arg
385              390              395              400
His Leu Trp

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<210> 5699  
 <211> 1565  
 <212> DNA  
 <213> Homo sapiens

<400> 5699  
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 180  
 ccacattttg cccaagttct aaggaaagtt ctgaaactta gtggtggtgt gtttgacttc  
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 300  
 cagttgagat ataaacgagg gaagaggtga agctttcagg aagccagaga gccctgccc  
 360

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 480  
 gaagttaaag cccaaccagc caaccacett cacatccttc tcatactagt agagtcattc  
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 gtacc  
 1565

&lt;210&gt; 5700

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5700

Met Val Ala Ile Val Gln Leu Gly Pro Glu Trp His Gly Met Leu Tyr  
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 Ser Gln Ala Asp Ser Lys Lys Lys Ser Asn Leu Met Met Ser Leu Phe  
 20 25 30  
 Glu Pro Gly Pro Glu Pro Leu Pro Trp Leu Gly Lys Met Ala Gln Leu

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Gly Pro Ile Ser Asp Ala Lys Glu Asn Pro Tyr Gly Glu Asp Asp Asn
  50          55          60
Lys Ser Pro Phe Pro Leu Gln Pro Lys Asn Lys Arg Ser Tyr Ala Gln
  65          70          75          80
Asn Val Thr Val Trp Ile Lys Pro Ser Gly Leu Gln Thr Asp Val Gln
      85          90          95
Lys Ile Leu Arg Asn Ala Arg Lys Leu Pro Glu Lys Thr Gln Thr Phe
      100          105          110
Tyr Lys Glu Leu Asn Arg Leu Arg Lys Ala Ala Leu Ala Phe Gly Phe
      115          120          125
Leu Asp Leu Leu Lys Gly Val Ala Asp Met Leu Glu Arg Glu Cys Thr
      130          135          140
Leu Leu Pro Glu Thr Ala His Pro Asp Ala Ala Phe Gln Leu Thr His
  145          150          155          160
Ala Ala Gln Gln Leu Lys Leu Ala Ser Thr Gly Thr Ser Glu Tyr Ala
      165          170          175
Ala Tyr Asp Gln Asn Ile Thr Pro Leu His Thr Asp Phe Ser Gly Ser
      180          185          190
Ser Thr Glu Arg Ile
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&lt;210&gt; 5701

&lt;211&gt; 1885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5701

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 1885

&lt;210&gt; 5702

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5702

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			20					25					30		
Leu	Leu	Tyr	Glu	Asp	Ile	Gly	Thr	Ser	Arg	Val	Arg	Tyr	Trp	Asp	Leu
		35				40						45			
Leu	Leu	Leu	Ile	Pro	Asn	Val	Leu	Phe	Leu	Ile	Phe	Leu	Leu	Trp	Lys
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Arg Ala Val Val Ser Met Thr Val Ser Thr Ser Asn Ala Ala Thr Val
      100          105          110
Ala Asp Lys Ile Leu Trp Glu Ile Thr Arg Phe Phe Leu Leu Ala Ile
      115          120          125
Glu Leu Ser Val Ile Ile Leu Gly Leu Ala Phe Gly His Leu Glu Ser
      130          135          140
Lys Ser Ser Ile Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Leu
145          150          155          160
Ala Tyr Ser Val Thr Gln Gly Thr Leu Glu Ile Leu Tyr Pro Asp Ala
      165          170          175
His Leu Ser Ala Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln
      180          185          190
Phe Trp Leu Val Ser Ser Cys Phe Phe Phe Leu Val Tyr Ser Leu Val
      195          200          205
Val Ile Leu Pro Lys Thr Pro Leu Lys Glu Arg Ile Ser Leu Pro Ser
      210          215          220
Arg Arg Ser Phe Tyr Val Tyr Ala Gly Ile Leu Ala Leu Leu Asn Leu
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Leu Cys Cys Val Asp Ala Thr Thr Phe Leu Tyr Phe Ser Phe Phe Ala
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Pro Leu Ile Tyr Val Ala Phe Leu Arg Gly Phe Phe Gly Ser Glu Pro
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Lys Ile Leu Phe Xaa Leu Gln Met Pro Ser Gly Arg Asp Arg Gly Ala
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Arg Cys Thr Pro Thr Pro Ala Leu Arg Cys Gly Pro Ala Gly Gly Pro
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&lt;210&gt; 5703

&lt;211&gt; 1496

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5703

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&lt;210&gt; 5704

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5704

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Val Glu Ala Ile Ser Leu Ser Ile Leu Val Gly Ser Ser Val Asp Tyr
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Cys Val His Leu Val Glu Gly Tyr Leu Leu Ala Gly Glu Asn Leu Pro
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Pro His Gln Ala Glu Asp Ala Arg Thr Gln Arg Gln Trp Arg Thr Leu
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Ala Lys Phe Gly Lys Ile Val Ala Leu Asn Thr Gly Val Ser Ile Leu
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Tyr Thr Leu Thr Val Ser Thr Ala Leu Leu Gly Ile Met Ala Pro Ser
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          225          230          235          240
Leu Leu Ala Gly Ala Leu Gly Leu Gly Ala Cys Leu Val Leu Leu Gln
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&lt;210&gt; 5705

&lt;211&gt; 768

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5705

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<211> 506

<212> PRT

<213> Homo sapiens

<400> 5708

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Pro	Leu	Leu	Pro	Arg	Asp	Tyr	Leu	Val	Gln	Thr	Val	Glu	Glu	Glu	Ala
				165					170					175	
Leu	Ile	Lys	Asn	Asn	Asn	Thr	Cys	Lys	Asp	Phe	Leu	Ile	Glu	Ala	Met
			180					185					190		
Lys	Tyr	His	Leu	Leu	Pro	Leu	Asp	Gln	Arg	Leu	Leu	Ile	Lys	Asn	Pro
		195					200					205			
Arg	Thr	Lys	Pro	Arg	Thr	Pro	Val	Ser	Leu	Pro	Lys	Val	Met	Ile	Val
	210					215						220			
Val	Gly	Gly	Gln	Ala	Pro	Lys	Ala	Ile	Arg	Ser	Val	Glu	Cys	Tyr	Asp
225					230					235				240	
Phe	Glu	Glu	Asp	Arg	Trp	Asp	Gln	Ile	Ala	Glu	Leu	Pro	Ser	Arg	Arg
				245					250					255	
Cys	Arg	Ala	Gly	Val	Val	Phe	Met	Ala	Gly	His	Val	Tyr	Ala	Val	Gly
			260					265					270		
Gly	Phe	Asn	Gly	Ser	Leu	Arg	Val	Arg	Thr	Val	Asp	Val	Tyr	Asp	Gly
		275					280					285			
Val	Lys	Asp	Gln	Trp	Thr	Ser	Ile	Ala	Ser	Met	Gln	Glu	Arg	Arg	Ser
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<210> 5709
<211> 1805
<212> DNA
<213> Homo sapiens
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4874

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&lt;210&gt; 5710

&lt;211&gt; 441

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5710

Asn	Leu	Thr	Pro	Leu	Val	Asp	Met	Glu	Glu	Leu	Glu	Met	Ser	Gly	Asn
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His	Phe	Pro	Glu	Ile	Arg	Pro	Gly	Ser	Phe	His	Gly	Leu	Ser	Ser	Leu
		20					25					30			
Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	Leu	Ile	Glu	Arg	Asn
		35				40					45				
Ala	Phe	Asp	Gly	Leu	Ala	Ser	Leu	Val	Glu	Leu	Asn	Leu	Ala	His	Asn

50	55	60
Asn Leu Ser Ser Leu Pro His Asp Leu Phe Thr Pro Leu Arg Tyr Leu		
65	70	75
Val Glu Leu His Leu His His Asn Pro Trp Asn Cys Asp Cys Asp Ile		80
	85	90
Leu Trp Leu Ala Trp Trp Leu Arg Glu Tyr Ile Pro Thr Asn Ser Thr		95
	100	105
Cys Cys Gly Arg Cys His Ala Pro Met His Met Arg Gly Arg Tyr Leu		110
	115	120
Val Glu Val Asp Gln Ala Ser Phe Gln Cys Ser Ala Pro Phe Ile Met		125
	130	135
Asp Ala Pro Arg Asp Leu Asn Ile Ser Glu Gly Arg Met Ala Glu Leu		140
	145	150
Lys Cys Arg Thr Pro Pro Met Ser Ser Val Lys Trp Leu Leu Pro Asn		155
	165	170
Gly Thr Val Leu Ser His Ala Ser Arg His Pro Arg Ile Ser Val Leu		175
	180	185
Asn Asp Gly Thr Leu Asn Phe Ser His Val Leu Leu Ser Asp Thr Gly		190
	195	200
Val Tyr Thr Cys Met Val Thr Asn Val Ala Gly Asn Ser Asn Ala Ser		205
	210	215
Ala Tyr Leu Asn Val Ser Thr Ala Glu Leu Asn Thr Ser Asn Tyr Ser		220
	225	230
Phe Phe Thr Thr Val Thr Val Glu Thr Thr Glu Ile Ser Pro Glu Asp		235
	245	250
Thr Thr Arg Lys Tyr Lys Pro Val Pro Thr Thr Ser Thr Gly Tyr Gln		255
	260	265
Pro Ala Tyr Thr Thr Ser Thr Thr Val Leu Ile Gln Thr Thr Arg Val		270
	275	280
Pro Lys Gln Val Ala Val Pro Ala Thr Asp Thr Thr Asp Lys Met Gln		285
	290	295
Thr Ser Leu Asp Glu Val Met Lys Thr Thr Lys Ile Ile Ile Gly Cys		300
	305	310
Phe Val Ala Val Thr Leu Leu Ala Ala Ala Met Leu Ile Val Phe Tyr		315
	325	330
Lys Leu Arg Lys Arg His Gln Gln Arg Ser Thr Val Thr Ala Ala Arg		335
	340	345
Thr Val Glu Ile Ile Gln Val Asp Glu Asp Ile Pro Ala Ala Thr Ser		350
	355	360
Ala Ala Ala Thr Ala Ala Pro Ser Gly Val Ser Gly Glu Gly Ala Val		365
	370	375
Val Leu Pro Thr Ile His Asp His Ile Asn Tyr Asn Thr Tyr Lys Pro		380
	385	390
Ala His Gly Ala His Trp Thr Glu Asn Ser Leu Gly Asn Ser Leu His		395
	405	410
Pro Thr Val Thr Thr Ile Ser Glu Pro Tyr Ile Ile Gln Thr His Thr		415
	420	425
Lys Asp Lys Val Gln Glu Thr Gln Ile		430
	435	440

<210> 5711  
 <211> 1142  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 5711

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 1142

&lt;210&gt; 5712

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5712

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Arg	Ile	Leu	Phe	His	Gly	Val	Phe	Tyr	Ala	Gly	Gly	Phe	Ala	Ile	Val
			20					25					30		
Tyr	Tyr	Leu	Ile	Gln	Lys	Phe	His	Ser	Arg	Ala	Leu	Tyr	Tyr	Lys	Leu
		35					40					45			

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly  
 50 55 60  
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe  
 65 70 75 80  
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys  
 85 90 95  
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln  
 100 105 110  
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln  
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 130 135 140  
 Glu  
 145

<210> 5713  
 <211> 1996  
 <212> DNA  
 <213> Homo sapiens

<400> 5713  
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 1996

<210> 5714  
 <211> 408  
 <212> PRT  
 <213> Homo sapiens

<400> 5714  
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 Val Ser Glu Phe Phe Met Asn Ala Lys Lys Asn Lys Pro Glu Trp Arg  
 35 40 45  
 Glu Glu Gln Met Ala Ser Ile Lys Lys Asp Tyr Tyr Lys Ala Leu Glu  
 50 55 60  
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180
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 1458

&lt;210&gt; 5716

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5716

Leu Gln Glu Glu Val Arg Val Lys Ile Lys Asp Leu Asn Glu His Ile  
 1 5 10 15  
 Val Cys Cys Leu Cys Ala Gly Tyr Phe Val Asp Ala Thr Thr Ile Thr

		20					25				30				
Glu	Cys	Leu	His	Thr	Phe	Cys	Lys	Ser	Cys	Ile	Val	Lys	Tyr	Leu	Gln
		35					40					45			
Thr	Ser	Lys	Tyr	Cys	Pro	Met	Cys	Asn	Ile	Lys	Ile	His	Glu	Thr	Gln
		50					55					60			
Pro	Leu	Leu	Asn	Leu	Lys	Leu	Asp	Arg	Val	Met	Gln	Asp	Ile	Val	Tyr
65					70					75					80
Lys	Leu	Val	Pro	Gly	Leu	Gln	Asp	Ser	Glu	Glu	Lys	Arg	Ile	Arg	Glu
				85					90					95	
Phe	Tyr	Gln	Ser	Arg	Gly	Leu	Asp	Arg	Val	Thr	Gln	Pro	Thr	Gly	Glu
			100					105					110		
Glu	Pro	Ala	Leu	Ser	Asn	Leu	Gly	Leu	Pro	Phe	Ser	Ser	Phe	Asp	His
		115					120					125			
Ser	Lys	Ala	His	Tyr	Tyr	Arg	Tyr	Asp	Glu	Gln	Leu	Asn	Leu	Cys	Leu
	130					135					140				
Glu	Arg	Leu	Arg												
145															

&lt;210&gt; 5717

&lt;211&gt; 1419

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5717

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900

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&lt;210&gt; 5718

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5718

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Leu	Leu	Met	Leu	Gly	Val	Thr	Leu	Pro	Asn	Ser	Tyr	Trp	Arg	Val	Ser
			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
			35				40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
			50			55					60				
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70				75						80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
				85				90						95	
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105					110		
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
			115				120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
			130			135				140					
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145				150				155						160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
				165				170						175	
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
			180				185					190			
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
			195				200					205			
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
			210			215					220				
Asn	Ala	Tyr	Val												

225

&lt;210&gt; 5719

&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5719

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 2267

&lt;210&gt; 5720

&lt;211&gt; 455

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5720

Val	Pro	Val	Leu	His	Lys	His	Pro	Cys	His	Leu	Val	Thr	Ser	Pro	Pro
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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
		35					40					45			
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50					55					60				
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65					70					75				80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
				85					90					95	
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
		100						105					110		
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
		115					120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

130	135	140
Phe His Tyr Ala Val	Asp Asn Leu Gly Ala	Asp Ala Ile Ala Thr Gly
145	150	155
His Tyr Ala Arg Thr	Ser Leu Glu Asp Glu Glu Val	Phe Glu Gln Lys
165	170	175
His Val Lys Lys Pro	Glu Gly Leu Phe Arg Asn Arg	Phe Glu Val Arg
180	185	190
Asn Ala Val Lys Leu	Leu Gln Ala Ala Asp Ser	Phe Lys Asp Gln Thr
195	200	205
Phe Phe Leu Ser Gln	Val Ser Gln Asp Ala Leu Arg	Arg Thr Ile Phe
210	215	220
Pro Leu Gly Gly Leu	Thr Lys Glu Phe Val Lys Lys	Ile Ala Ala Glu
225	230	235
Asn Arg Leu His His	Val Leu Gln Lys Lys Glu Ser	Met Gly Met Cys
245	250	255
Phe Ile Gly Lys Arg	Asn Phe Glu His Phe Leu Leu	Gln Tyr Leu Gln
260	265	270
Pro Arg Pro Gly His	Phe Ile Ser Ile Glu Asp Asn	Lys Val Leu Gly
275	280	285
Thr His Lys Gly Trp	Phe Leu Tyr Thr Leu Gly Gln	Arg Ala Asn Ile
290	295	300
Gly Gly Leu Arg Glu	Pro Trp Tyr Val Val Glu Lys	Asp Ser Val Lys
305	310	315
Gly Asp Val Phe Val	Ala Pro Arg Thr Asp His Pro	Ala Leu Tyr Arg
325	330	335
Asp Leu Leu Arg Thr	Ser Arg Val His Trp Ile Ala	Glu Glu Pro Pro
340	345	350
Ala Ala Leu Val Arg	Asp Lys Met Met Glu Cys His	Phe Arg Phe Arg
355	360	365
His Gln Met Ala Leu	Val Pro Cys Val Leu Thr Leu	Asn Gln Asp Gly
370	375	380
Thr Val Trp Val Thr	Ala Val Gln Ala Val Arg Ala	Leu Ala Thr Gly
385	390	395
Gln Phe Ala Val Phe	Tyr Lys Gly Asp Glu Cys Leu	Gly Ser Gly Lys
405	410	415
Ile Leu Arg Leu Gly	Pro Ser Ala Tyr Thr Leu Gln	Lys Gly Gln Arg
420	425	430
Arg Ala Gly Met Ala	Thr Glu Ser Pro Ser Asp Ser	Pro Glu Asp Gly
435	440	445
Pro Gly Leu Ser Pro	Leu Leu	
450	455	

&lt;210&gt; 5721

&lt;211&gt; 400

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5721

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120

ggaatagcct tgccatgtct gttggacgct gacaaatatt tctggtgggc gcttttgtac  
180

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 tgagactgca gactttcatc tacaacagtg gttaatgtaa aagagtagtt atgggtgtaaa  
 300  
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<210> 5722  
 <211> 80  
 <212> PRT  
 <213> Homo sapiens

<400> 5722  
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 20 25 30  
 Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu Pro Cys Leu Leu  
 35 40 45  
 Asp Ala Asp Lys Tyr Phe Trp Trp Ala Leu Leu Tyr Leu Val Asn Thr  
 50 55 60  
 Ser Phe Lys Glu Asp Gly Pro Asp Tyr Thr Glu His Leu Pro Cys Pro  
 65 70 75 80

<210> 5723  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

<400> 5723  
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 180  
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 376

<210> 5724  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 5724  
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20	25	30	
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
35	40	45	
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
50	55	60	
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
85	90	95	
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
100	105	110	
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala			
115	120	125	

&lt;210&gt; 5725

&lt;211&gt; 1160

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5725

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960

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<210> 5726  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<400> 5726  
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 Leu Tyr Ala Arg Pro Ala Leu Pro Leu Leu Leu Arg Ser Gly Gly Gly  
 20 25 30  
 Ser Arg Pro Pro Gly Ser Arg Pro Thr Ala His Gly Arg Ala Trp Gly  
 35 40 45  
 Ala Ser Arg Ala Arg Arg Pro Ala Pro Gly Gly Pro Phe Pro Gly Val  
 50 55 60  
 Ser Thr Asp Asp Ser Ala Val Pro Pro Pro Gly Gly Ala Pro His Phe  
 65 70 75 80  
 Gly His Tyr Arg Thr Gly Gly Gly Ala Met Gly Leu Arg Ser Ala Ser  
 85 90 95  
 Val Ser Ser Val Ala Gly Met Gly Met Asp Pro Ser Thr Ala Gly Gly  
 100 105 110  
 Val Pro Phe Gly Leu Tyr Thr Pro Ala Ser Arg Gly Thr Gly Asp Ser  
 115 120 125  
 Glu Arg Ala Pro Gly Gly Gly Gly Ser Ala Ser Asp Ser Thr Tyr Ala  
 130 135 140  
 His Gly Asn Gly Tyr Gln Glu Thr Gly Gly Gly His His Arg Asp Gly  
 145 150 155 160  
 Met Leu Tyr Leu Gly Ser Arg Ala Ser Leu Ala Asp Ala Leu Pro Leu  
 165 170 175  
 His Ile Ala Pro Arg Trp Phe Ser Ser His Ser Gly Phe Lys Cys Pro  
 180 185 190  
 Ile Cys Ser Lys Ser Val Ala Ser Asp Glu Met Glu Met His Phe Ile  
 195 200 205  
 Met Cys Leu Ser Lys Pro Arg Leu Ser Tyr Asn Asp Asp Val Leu Thr  
 210 215 220  
 Lys Asp Ala Gly Glu Cys Val Ile Cys Leu Glu Leu Leu Gln Gly  
 225 230 235 240  
 Asp Thr Ile Ala Arg Leu Pro Cys Leu Cys Ile Tyr His Lys Ser Cys  
 245 250 255  
 Ile Asp Ser Trp Phe Glu Val Asn Arg Ser Cys Pro Glu His Pro Ala  
 260 265 270  
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<210> 5727  
 <211> 1237

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5727

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120  
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1237

&lt;210&gt; 5728

&lt;211&gt; 368

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5728

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20	25	30	
Lys Tyr Arg Asp Ile Asp Glu Asp Glu Ile Leu Arg Thr Leu Ser Pro			
35	40	45	
Glu Glu Leu Glu Gln Leu Asp Cys Glu Leu Gln Glu Met Asp Pro Glu			
50	55	60	
Asn Met Leu Leu Pro Ala Gly Leu Arg Gln Arg Asp Gln Thr Lys Lys			
65	70	75	80
Ser Pro Thr Gly Pro Leu Asp Arg Glu Ala Leu Leu Gln Tyr Leu Glu			
85	90	95	
Gln Gln Ala Leu Glu Val Lys Glu Arg Asp Asp Leu Val Pro Phe Thr			
100	105	110	
Gly Glu Lys Lys Gly Lys Pro Tyr Ile Gln Pro Lys Arg Glu Ile Pro			
115	120	125	
Ala Glu Glu Gln Ile Thr Leu Glu Pro Glu Leu Glu Glu Ala Leu Ala			
130	135	140	
His Ala Thr Asp Ala Glu Met Cys Asp Ile Ala Ala Ile Leu Asp Met			
145	150	155	160
Tyr Thr Leu Met Ser Asn Lys Gln Tyr Tyr Asp Ala Leu Cys Ser Gly			
165	170	175	
Glu Ile Cys Asn Thr Glu Gly Ile Ser Ser Val Val Gln Pro Asp Lys			
180	185	190	
Tyr Lys Pro Val Pro Asp Glu Pro Pro Asn Pro Thr Asn Ile Glu Glu			
195	200	205	
Ile Leu Lys Arg Val Arg Ser Asn Asp Lys Glu Leu Glu Glu Val Asn			
210	215	220	
Leu Asn Asn Ile Gln Asp Ile Pro Ile Pro Met Leu Ser Glu Leu Cys			
225	230	235	240
Glu Ala Met Lys Ala Asn Thr Tyr Val Arg Ser Phe Ser Leu Val Ala			
245	250	255	
Thr Arg Ser Gly Asp Pro Ile Ala Asn Ala Val Ala Asp Met Leu Arg			
260	265	270	
Glu Asn Arg Ser Leu Gln Ser Leu Asn Ile Glu Ser Asn Phe Ile Ser			
275	280	285	
Ser Thr Gly Leu Met Ala Val Leu Lys Ala Val Arg Glu Asn Ala Thr			
290	295	300	
Leu Thr Glu Leu Arg Val Asp Asn Gln Arg Gln Trp Pro Gly Asp Ala			
305	310	315	320
Val Glu Met Glu Met Ala Thr Val Leu Glu Gln Cys Pro Ser Ile Val			
325	330	335	
Arg Phe Gly Tyr His Phe Thr Gln Gln Gly Pro Arg Ala Arg Ala Ala			
340	345	350	
Gln Ala Met Thr Arg Asn Asn Glu Leu Arg Arg Gln Gln Lys Lys Arg			
355	360	365	

&lt;210&gt; 5729

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5729

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 240  
 gggggccact cacctgcttg cgtctcaggc gtccctcctg gaccttcctc cgcaggaacc  
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 381

<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

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			20				25					30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
		35				40					45				
Gly	Ser	Ser	Ser	Ala	Gly	Gly	Ser	Ser	Ala	Arg	Phe	Cys	Thr	Lys	Phe
	50					55					60				

<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 aactctagaa gtctggatgt cgggtgggct ctgagatatg ccgtttacgg gttcttcttc  
 240  
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 420  
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caggtgcact gtggacgtgg gtctgggggt ctcacccgcc cagcgagagc agaaccaatc  
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 780  
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<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
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Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
		50				55					60				
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65					70					75					80
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
			85						90					95	
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
			100					105						110	
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
		115					120						125		
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
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Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145					150					155					160
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165						170					175	
Ala	Asn	Leu	Ala	Ala	Leu	Phe	Trp	Tyr	Ala	Tyr	Leu	Ala	Ser	Leu	Gly
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Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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<210> 5734  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 5734  
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 Leu Cys Leu Leu Phe Ala Lys Leu Val Ser Tyr Thr Phe Leu Phe Trp  
 35 40 45  
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 Gly Cys Thr Gly Ser Pro Asp Pro Leu Arg His Ser Ser His Arg Thr  
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 Ser Lys

<210> 5735  
 <211> 4241  
 <212> DNA  
 <213> Homo sapiens

<400> 5735

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3240



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 4241

&lt;210&gt; 5736

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5736

Met	Pro	Gly	Pro	Thr	Gln	Thr	Leu	Ser	Pro	Asn	Gly	Glu	Asn	Asn	Asn
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Asp	Ile	Ile	Gln	Asp	Asn	Asn	Gly	Thr	Ile	Ile	Pro	Phe	Arg	Lys	His
			20					25					30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
			35					40				45			
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
			50					55			60				
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
65					70					75				80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
				85					90				95		
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

	100		105		110	
Glu Tyr Ile	His Asn Phe Lys	Leu Leu Gln Ala Ser	Phe Lys Arg Met			
	115	120	125			
Asn Val Asp	Lys Val Ile Pro	Val Glu Lys Leu Val	Lys Gly Arg Phe			
	130	135	140			
Gln Asp Asn	Leu Asp Phe Ile	Gln Trp Phe Lys	Lys Phe Tyr Asp Ala			
	145	150	155	160		
Asn Tyr Asp	Gly Lys Glu Tyr	Asp Pro Val Glu	Ala Arg Gln Gly Gln			
	165	170	175			
Asp Ala Ile	Pro Pro Pro Asp	Pro Gly Glu Gln	Ile Phe Asn Leu Pro			
	180	185	190			
Lys Lys Ser	His His Ala Asn	Ser Pro Thr Ala	Gly Ala Ala Lys Ser			
	195	200	205			
Ser Pro Ala	Ala Lys Pro Gly	Ser Thr Pro Ser	Arg Pro Ser Ser Ala			
	210	215	220			
Lys Arg Ala	Ser Ser Ser Gly	Ser Ala Ser Lys	Ser Asp Lys Asp Leu			
	225	230	235	240		
Glu Thr Gln	Val Ile Gln Leu	Asn Glu Gln Val	His Ser Leu Lys Leu			
	245	250	255			
Ala Leu Glu	Gly Val Glu Lys	Glu Arg Asp Phe	Tyr Phe Gly Lys Leu			
	260	265	270			
Arg Glu Ile	Glu Leu Leu Cys	Gln Glu His Gly	Gln Glu Asn Asp Asp			
	275	280	285			
Leu Val Gln	Arg Leu Met Asp	Ile Leu Tyr Ala	Ser Glu Glu His Glu			
	290	295	300			
Gly His Thr	Glu Glu Pro Glu	Ala Glu Glu Gln	Ala His Glu Gln Gln			
	305	310	315	320		
Pro Pro Gln	Gln Glu Tyr					
	325					

&lt;210&gt; 5737

&lt;211&gt; 340

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5737

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340

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&lt;210&gt; 5738

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5738

Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu  
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 Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu  
 20 25 30  
 Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu  
 35 40 45  
 Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val  
 50 55 60  
 Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His  
 65 70 75 80  
 Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln  
 85 90 95  
 Gly Gly Xaa

&lt;210&gt; 5739

&lt;211&gt; 780

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5739

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 780

&lt;210&gt; 5740

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5740

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Met Ile Arg Lys Gln Ser Gln His His Gly Pro Ser Leu Ser Met Ser
 1           5           10           15
Ser Lys Pro Cys Gln Ala Leu Gln Leu Leu Ser Thr Leu Pro Ser Gly
          20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
          35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
          50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
          85           90           95
Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
          100          105          110
Phe Leu Gly Arg Ala Gln Pro Gln
          115          120

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&lt;210&gt; 5741

&lt;211&gt; 2444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5741

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2444

&lt;210&gt; 5742

<211> 427  
 <212> PRT  
 <213> Homo sapiens

<400> 5742

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35      40      45
Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe
50      55      60
Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys
65      70      75      80
Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
85      90      95
Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
100     105     110
Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
115     120     125
Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
130     135     140
Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr
145     150     155     160
Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
165     170     175
Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
180     185     190
Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu
195     200     205
Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
210     215     220
Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
225     230     235     240
Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu
245     250     255
Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys
260     265     270
Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala
275     280     285
Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp
290     295     300
Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
305     310     315     320
Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
325     330     335
Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
340     345     350
Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
355     360     365
Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
370     375     380
Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

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<213> Homo sapiens
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<212> PRT
<213> Homo sapiens
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<210> 5745  
<211> 849

<212> DNA  
 <213> Homo sapiens

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 180  
 gccgttctgc aggggtgacgc cctccccgta cctcgctgag agccacctgc agacacagca  
 240  
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 300  
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<210> 5746  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 5746  
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 Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro  
 35 40 45  
 Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro  
 50 55 60  
 Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp  
 65 70 75 80  
 Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His  
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 Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp



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<210> 5747
<211> 1999
<212> DNA
<213> Homo sapiens
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4905

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 1440  
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 1620  
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 1800  
 cttctttggt atggaatttt tcccttcagt gactgagctg tctctgatag gccatgcaag  
 1860  
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 1920  
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 1980  
 aaaaaaaaaa aaaaaaaaaa  
 1999

&lt;210&gt; 5748

&lt;211&gt; 492

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5748

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Val	Gln	Ile	Arg	Val	Ala	Ile	Gln	Glu	Ala	Glu	Asp	Val	Asp	Glu	Leu
			20					25				30			
Glu	Asp	Glu	Glu	Glu	Gly	Ala	Glu	Thr	Arg	Gly	Ala	Gly	Asp	Pro	Ala
		35					40				45				
Arg	Tyr	Leu	Ser	Pro	Gly	Trp	Gly	Ser	Ala	Ser	Glu	Glu	Glu	Pro	Ser
	50					55					60				
Arg	Gly	His	Ser	Gly	Thr	Thr	Ala	Ser	Gly	Gly	Glu	Asn	Glu	Arg	Glu
65					70					75				80	
Asp	Leu	Glu	Gln	Glu	Trp	Lys	Pro	Pro	Asp	Glu	Glu	Leu	Ile	Lys	Lys
			85					90					95		
Leu	Val	Asp	Gln	Ile	Glu	Phe	Tyr	Phe	Ser	Asp	Glu	Asn	Leu	Glu	Lys
		100						105					110		
Asp	Ala	Phe	Leu	Leu	Lys	His	Val	Arg	Arg	Asn	Lys	Leu	Gly	Tyr	Val
		115				120						125			
Ser	Val	Lys	Leu	Leu	Thr	Ser	Phe	Lys	Lys	Val	Lys	His	Leu	Thr	Arg
	130					135					140				
Asp	Trp	Arg	Thr	Thr	Ala	His	Ala	Leu	Lys	Tyr	Ser	Val	Val	Leu	Glu
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<210> 5749
<211> 2849
<212> DNA
<213> Homo sapiens
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4907

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480  
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720  
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 2640  
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 2760  
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 2820  
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 2849

&lt;210&gt; 5750

&lt;211&gt; 522

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5750

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		20						25					30		
Val	Gly	Pro	Gly	Ala	Ser	Gly	Val	Cys	Pro	Thr	Ala	Cys	Ile	Cys	Ala
		35					40					45			
Thr	Asp	Ile	Val	Ser	Cys	Thr	Asn	Lys	Asn	Leu	Ser	Lys	Val	Pro	Gly
		50				55					60				
Asn	Leu	Phe	Arg	Leu	Ile	Lys	Arg	Leu	Asp	Leu	Ser	Tyr	Asn	Arg	Ile
65					70				75					80	
Gly	Leu	Leu	Asp	Ser	Glu	Trp	Ile	Pro	Val	Ser	Phe	Ala	Lys	Leu	Asn

85								90					95			
Thr	Leu	Ile	Leu	Arg	His	Asn	Asn	Ile	Thr	Ser	Ile	Ser	Thr	Gly	Ser	
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Phe	Ser	Thr	Thr	Pro	Asn	Leu	Lys	Cys	Leu	Asp	Leu	Ser	Ser	Asn	Lys	
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Leu	Lys	Thr	Val	Lys	Asn	Ala	Val	Phe	Gln	Glu	Leu	Lys	Val	Leu	Glu	
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Val	Leu	Leu	Leu	Tyr	Asn	Asn	His	Ile	Ser	Tyr	Leu	Asp	Pro	Ser	Ala	
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Phe	Gly	Gly	Leu	Ser	Gln	Leu	Gln	Lys	Leu	Tyr	Leu	Ser	Gly	Asn	Phe	
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Leu	Thr	Gln	Phe	Pro	Met	Asp	Leu	Tyr	Val	Gly	Arg	Phe	Lys	Leu	Ala	
180								185				190				
Glu	Leu	Met	Phe	Leu	Asp	Val	Ser	Tyr	Asn	Arg	Ile	Pro	Ser	Met	Pro	
195								200				205				
Met	His	His	Ile	Asn	Leu	Val	Pro	Gly	Lys	Gln	Leu	Arg	Gly	Ile	Tyr	
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Leu	His	Gly	Asn	Pro	Phe	Val	Cys	Asp	Cys	Ser	Leu	Tyr	Ser	Leu	Leu	
225								230				235				
Val	Phe	Trp	Tyr	Arg	Arg	His	Phe	Ser	Ser	Val	Met	Asp	Phe	Lys	Asn	
245								250				255				
Asp	Tyr	Thr	Cys	Arg	Leu	Trp	Ser	Asp	Ser	Arg	His	Ser	Arg	Gln	Val	
260								265				270				
Leu	Leu	Leu	Gln	Asp	Ser	Phe	Met	Asn	Cys	Ser	Asp	Ser	Ile	Ile	Asn	
275								280				285				
Gly	Ser	Phe	Arg	Ala	Leu	Gly	Phe	Ile	His	Glu	Ala	Gln	Val	Gly	Glu	
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Arg	Leu	Met	Val	His	Cys	Asp	Ser	Lys	Thr	Gly	Asn	Ala	Asn	Thr	Asp	
305								310				315				
Phe	Ile	Trp	Val	Gly	Pro	Asp	Asn	Arg	Leu	Leu	Glu	Pro	Asp	Lys	Glu	
325								330				335				
Met	Glu	Asn	Phe	Tyr	Val	Phe	His	Asn	Gly	Ser	Leu	Val	Ile	Glu	Ser	
340								345				350				
Pro	Arg	Phe	Glu	Asp	Ala	Gly	Val	Tyr	Ser	Cys	Ile	Ala	Met	Asn	Lys	
355								360				365				
Gln	Arg	Leu	Leu	Asn	Glu	Thr	Val	Asp	Val	Thr	Ile	Asn	Val	Ser	Asn	
370								375				380				
Phe	Thr	Val	Ser	Arg	Ser	His	Ala	His	Glu	Ala	Phe	Asn	Thr	Ala	Phe	
385								390				395				
Thr	Thr	Leu	Ala	Ala	Cys	Val	Ala	Ser	Ile	Val	Leu	Val	Leu	Leu	Tyr	
405								410				415				
Leu	Tyr	Leu	Thr	Pro	Cys	Pro	Cys	Lys	Cys	Lys	Thr	Lys	Arg	Gln	Lys	
420								425				430				
Asn	Met	Leu	His	Gln	Ser	Asn	Ala	His	Ser	Ser	Ile	Leu	Ser	Pro	Gly	
435								440				445				
Pro	Ala	Ser	Asp	Ala	Ser	Ala	Asp	Glu	Arg	Lys	Ala	Gly	Ala	Gly	Lys	
450								455				460				
Arg	Val	Val	Phe	Leu	Glu	Pro	Leu	Lys	Asp	Thr	Ala	Ala	Gly	Gln	Asn	
465								470				475				
Gly	Lys	Val	Arg	Leu	Phe	Pro	Ser	Glu	Ala	Val	Ile	Ala	Glu	Gly	Ile	
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Leu	Lys	Ser	Thr	Arg	Gly	Lys	Ser	Asp	Ser	Asp	Ser	Val	Asn	Ser	Val	
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515

520

<210> 5751  
 <211> 926  
 <212> DNA  
 <213> Homo sapiens

<400> 5751  
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 120  
 gtgagggcta gctgagggct ctctgcct tctgtcattc gctggctact aatcgggcac  
 180  
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 240  
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 360  
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 420  
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 720  
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 780  
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 840  
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 926

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 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 5752  
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 20 25 30  
 Leu Glu Ile Arg Ser Val His Val Gly Val Val Val Ile Lys Ala Val  
 35 40 45  
 Ser Ser Gly Phe Tyr Val Ala Met Asn Arg Arg Gly Arg Leu Tyr Gly

50		55		60
Ser Arg Leu Tyr Thr Val Asp Cys Arg Phe Arg Glu Arg Ile Glu Glu				
65		70		75
Asn Gly His Asn Thr Tyr Ala Ser Gln Arg Trp Arg Arg Arg Gly Gln				80
	85		90	95
Pro Met Phe Leu Ala Leu Asp Arg Arg Gly Gly Pro Arg Pro Gly Gly				
	100		105	110
Arg Thr Arg Arg Tyr His Leu Ser Ala His Phe Leu Pro Val Leu Val				
	115		120	125
Ser				

<210> 5753  
 <211> 5668  
 <212> DNA  
 <213> Homo sapiens

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 420  
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&lt;210&gt; 5754

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5754

Asp Ser Leu Glu Ser Asn Ile Ser Asp Gln Asp Ser Asp Ser Asn Met

1	5	10	15
Asp Leu Met	Pro Gly Ile Leu Lys	Gln Pro Ser Leu Thr	Leu Glu Leu
	20	25	30
Phe Pro Asn His Thr Asp Asn Leu	Asn Ser Ser Gln Arg	Leu Ser Pro	
	35	40	45
Ser Ser Arg Met Arg Lys Leu Pro	Gln Gly Arg Pro Val	Pro Pro Leu	
	50	55	60
Gly Pro Glu Thr Arg Val Ser Val	Val Trp Val Glu Arg Tyr Asp	Asp	
65	70	75	80
Ile Glu Asn Phe Pro Leu Ser Glu	Leu Met Thr Glu Ile Ser Thr	Gly	
	85	90	95
Val Glu Thr Thr Ala Asn Ser Ser	Thr Ser Leu Arg Ser Thr Thr	Leu	
	100	105	110
Glu Lys Glu Val Pro Val Ile Phe	Ile His Pro Leu Asn Thr Gly	Leu	
	115	120	125
Phe Arg Ile Lys Ile Gln Gly Ala	Thr Gly Lys Phe Asn Met Val Ile		
	130	135	140
Pro Leu Val Asp Gly Met Ile Val	Ser Arg Arg Ala Leu Gly Phe	Leu	
145	150	155	160
Val Arg Gln Thr Val Ile Asn Ile	Cys Arg Arg Lys Arg Leu Glu	Ser	
	165	170	175
Asp Ser Tyr Ser Pro Pro His Val	Arg Arg Lys Gln Lys Ile Thr Asp		
	180	185	190
Ile Val Asn Lys Tyr Arg Asn Lys	Gln Leu Glu Pro Glu Phe Tyr Thr		
	195	200	205
Ser Leu Phe Gln Glu Val Gly Leu	Lys Asn Cys Ser Ser		
	210	215	220

&lt;210&gt; 5755

&lt;211&gt; 1513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5755

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&lt;210&gt; 5756

&lt;211&gt; 415

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5756

Xaa	Arg	Val	Lys	Gly	Asn	Leu	Tyr	Cys	Glu	Val	Cys	Pro	Glu	Asp	Arg
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Pro	Leu	Ile	Val	Gln	Phe	Cys	Ala	Asn	Asp	Pro	Glu	Val	Phe	Val	Gln
			20					25					30		
Ala	Ala	Leu	Leu	Ala	Gln	Asp	Tyr	Cys	Asp	Ala	Ile	Asp	Leu	Asn	Leu
		35					40					45			
Gly	Cys	Pro	Gln	Met	Ile	Ala	Lys	Arg	Gly	His	Tyr	Gly	Ala	Phe	Leu
	50					55					60				
Gln	Asp	Glu	Trp	Asp	Leu	Leu	Gln	Arg	Met	Ile	Leu	Leu	Ala	His	Glu
65					70					75					80
Lys	Leu	Ser	Val	Pro	Val	Thr	Cys	Lys	Ile	Arg	Val	Phe	Pro	Glu	Ile
					85					90				95	
Asp	Lys	Thr	Val	Arg	Tyr	Ala	Gln	Met	Leu	Glu	Lys	Ala	Gly	Cys	Gln
			100					105					110		
Leu	Leu	Thr	Val	His	Gly	Arg	Thr	Lys	Glu	Gln	Lys	Gly	Pro	Leu	Ser

115	120	125
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130	135	140
Ile Pro Val Phe Ala Asn Gly Asn Ile Gln Cys Leu Gln Asp Val Glu		
145	150	155
Arg Cys Leu Arg Asp Thr Gly Val Gln Gly Val Met Ser Ala Glu Gly		160
165	170	175
Asn Leu His Asn Pro Ala Leu Phe Glu Gly Arg Ser Pro Ala Val Trp		
180	185	190
Glu Leu Ala Glu Glu Tyr Leu Asp Ile Val Arg Glu His Pro Cys Pro		
195	200	205
Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu		
210	215	220
Gln Val His Gln Glu Leu Arg Glu Glu Leu Ala Lys Val Lys Thr Leu		
225	230	235
Glu Gly Ile Ala Ala Val Ser Gln Glu Leu Lys Leu Arg Cys Gln Glu		240
245	250	255
Glu Ile Ser Arg Gln Glu Gly Ala Lys Pro Thr Gly Asp Leu Pro Phe		
260	265	270
His Trp Ile Cys Gln Pro Tyr Ile Arg Pro Gly Pro Arg Glu Gly Ser		
275	280	285
Lys Glu Lys Ala Gly Ala Arg Ser Lys Arg Ala Leu Glu Glu Glu Glu		
290	295	300
Gly Gly Thr Glu Val Leu Ser Lys Asn Lys Gln Lys Lys Gln Leu Arg		
305	310	315
Asn Pro His Lys Thr Phe Asp Pro Ser Leu Lys Pro Lys Tyr Ala Lys		320
325	330	335
Cys Asp Gln Cys Gly Asn Pro Lys Gly Asn Arg Cys Val Phe Ser Leu		
340	345	350
Cys Arg Gly Cys Cys Lys Lys Arg Ala Ser Lys Glu Thr Ala Asp Cys		
355	360	365
Pro Gly His Gly Leu Leu Phe Lys Thr Lys Leu Glu Lys Ser Leu Ala		
370	375	380
Trp Lys Glu Ala Gln Pro Glu Leu Gln Glu Pro Gln Pro Ala Ala Pro		
385	390	395
Gly Thr Pro Gly Gly Phe Ser Glu Val Met Gly Ser Ala Leu Ala		400
405	410	415

&lt;210&gt; 5757

&lt;211&gt; 2362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5757

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&lt;210&gt; 5758

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5758

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		20						25					30		
Asp	Gly	Ala	Leu	Glu	Asn	Ala	Gln	Asn	Leu	Gly	Tyr	Gln	Gly	Ala	Lys
	35						40					45			
Phe	Ala	Trp	Glu	Ser	Ala	Asp	Ser	Gly	Leu	Glu	Val	Cys	Pro	Glu	Asp
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Ile	Tyr	Gly	Val	Gln	Glu	Val	His	Val	Asn	Gly	Ala	Val	Val	Leu	Ala
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Phe	Glu	Leu	Tyr	Tyr	His	Thr	Thr	Gln	Asp	Leu	Gln	Leu	Phe	Arg	Glu
			85					90						95	
Gly	Gly	Gly	Trp	Glu	Val	Val	Arg	Ala	Val	Ala	Lys	Phe	Trp	Cys	Ser
			100					105					110		
Arg	Val	Glu	Trp	Ser	Pro	Arg	Glu	Glu	Lys	Tyr	His	Leu	Arg	Gly	Val
		115					120					125			
Met	Ser	Pro	Asp	Glu	Tyr	His	Ser	Gly	Val	Asn	Asn	Ser	Val	Tyr	Thr
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Asn	Val	Leu	Val	Gln	Asn	Ser	Leu	Arg	Phe	Ala	Ala	Ala	Leu	Ala	Gln
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Asp	Leu	Gly	Leu	Pro	Ile	Pro	Ser	Gln	Trp	Leu	Ala	Val	Ala	Asp	Lys
			165					170						175	
Ile	Lys	Val	Pro	Phe	Asp	Val	Glu	Gln	Asn	Phe	His	Pro	Glu	Phe	Asp
			180					185					190		
Gly	Tyr	Glu	Pro	Gly	Glu	Val	Val	Lys	Gln	Ala	Asp	Val	Val	Leu	Leu
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Gly	Tyr	Pro	Val	Pro	Phe	Ser	Leu	Ser	Pro	Asp	Val	Arg	Arg	Lys	Asn
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<210> 5759
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<212> DNA
<213> Homo sapiens
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 1333

&lt;210&gt; 5760

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5760

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			20				25						30		
Asp	Ser	Val	Glu	Ser	Ala	Val	Asn	Ala	Glu	Arg	Gly	Gly	Ala	Asp	Arg
		35				40						45			
Ile	Glu	Leu	Cys	Ser	Gly	Leu	Ser	Glu	Gly	Gly	Thr	Thr	Pro	Ser	Met
	50					55					60				
Gly	Val	Leu	Gln	Val	Val	Lys	Gln	Ser	Val	Gln	Ile	Pro	Val	Phe	Val
65					70					75					80
Met	Ile	Arg	Pro	Arg	Gly	Gly	Asp	Phe	Leu	Tyr	Ser	Asp	Arg	Glu	Ile
			85					90						95	
Glu	Val	Met	Lys	Ala	Asp	Ile	Arg	Leu	Ala	Lys	Leu	Tyr	Gly	Ala	Asp
			100					105					110		
Gly	Leu	Val	Phe	Gly	Ala	Leu	Thr	Glu	Asp	Gly	His	Ile	Asp	Lys	Glu
		115				120						125			
Leu	Cys	Met	Ser	Leu	Met	Ala	Ile	Cys	Arg	Pro	Leu	Pro	Val	Thr	Phe
	130					135					140				
His	Arg	Ala	Phe	Asp	Met	Val	His	Asp	Pro	Met	Ala	Ala	Leu	Glu	Thr
145					150					155					160
Leu	Leu	Thr	Leu	Gly	Phe	Glu	Arg	Val	Leu	Thr	Ser	Gly	Cys	Asp	Ser
			165					170						175	
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[illegible]

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<210> 5761
<211> 1452
<212> DNA
<213> Homo sapiens
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240
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360
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1020

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&lt;210&gt; 5762

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5762

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			20					25					30		
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Tyr	Lys	Gly	Ala	Gly	Pro	Glu	Ile	Arg	Asp	Ala	Ile	Gln	Asn	Pro	Asn
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			85					90						95	
Val	Arg	Leu	Lys	Arg	Phe	Tyr	Glu	Phe	Ser	Ile	Arg	Leu	Glu	Lys	Ala
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Leu	Gln	Ser	Leu	Leu	Glu	Ser	Leu	Thr	Cys	Pro	Pro	Tyr	Thr	Pro	Thr
		115					120					125			
Gln	His	Leu	Glu	Arg	Glu	Gln	Ala	Leu	Ala	Lys	Glu	Phe	Ala	Glu	Ile
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Ile	Gln	Asn	Asp	Phe	Ser	Tyr	Tyr	Arg	Arg	Thr	Ile	Ser	Arg	Asn	Arg
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Ile	Asn	Asn	Met	His	Leu	Asp	Ile	Glu	Asn	Glu	Val	Asn	Asn	Glu	Met
			180					185						190	
Ala	Asn	Arg	Met	Ser	Leu	Phe	Tyr	Ala	Glu	Ala	Thr	Pro	Met	Leu	Lys
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Pro	Ile	Glu	Asn	Thr	Thr	Asp	Cys	Leu	Ser	Thr	Met	Thr	Ser	Val	Cys
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Tyr	Asp	His	Val	His	Pro	Val	Gly	Ala	Phe	Cys	Lys	Thr	Ser	Lys	Ile				
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&lt;210&gt; 5763

&lt;211&gt; 3840

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5763

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&lt;210&gt; 5764

&lt;211&gt; 466

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5764

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		20						25					30		
Leu	Tyr	Phe	Cys	Arg	Tyr	Cys	Ser	Glu	Leu	Arg	Ser	Leu	Glu	Cys	Val
		35					40					45			
Ser	His	Glu	Val	Asp	Ser	His	Tyr	Cys	Pro	Ser	Cys	Leu	Glu	Asn	Met
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Tyr Tyr Leu Ala Cys Gly Phe Cys Arg Trp Thr Ser Arg Asp Val Gly
      115        120        125
Met Ala Asp Lys Ser Val Ala Ser Gly Gly Trp Gln Glu Pro Glu Asn
      130        135        140
Pro His Thr Gln Arg Met Asn Lys Leu Ile Glu Tyr Tyr Gln Gln Leu
145          150        155        160
Ala Gln Lys Glu Lys Val Glu Arg Asp Arg Lys Lys Leu Ala Arg Arg
      165        170        175
Arg Asn Tyr Met Pro Leu Ala Phe Ser Asp Lys Tyr Gly Leu Gly Thr
      180        185        190
Arg Leu Gln Arg Pro Arg Ala Gly Ala Ser Ile Ser Thr Leu Ala Gly
      195        200        205
Leu Ser Leu Lys Glu Gly Glu Asp Gln Lys Glu Val Lys Ile Glu Pro
      210        215        220
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225          230        235        240
Arg Pro Val Asn Leu Thr Glu Val Thr Thr Leu Gln Gln Arg Leu Leu
      245        250        255
Gln Pro Asp Phe Gln Pro Val Cys Ala Ser Gln Leu Tyr Pro Arg His
      260        265        270
Lys His Leu Leu Ile Lys Arg Ser Leu Arg Cys Arg Lys Cys Glu His
      275        280        285
Asn Leu Ser Lys Pro Glu Phe Asn Pro Thr Ser Ile Lys Phe Lys Ile
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Asn Pro Val Glu Asn Leu Thr His Val Thr Leu Phe Glu Cys Glu Glu
      340        345        350
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      355        360        365
Lys Glu Leu Val Leu Ala Gly Lys Asp Ala Ala Ala Glu Tyr Asp Glu
      370        375        380
Leu Ala Glu Pro Gln Asp Phe Gln Asp Asp Pro Asp Ile Ile Ala Phe
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Arg Lys Ala Asn Lys Val Gly Ile Phe Ile Lys Val Thr Pro Gln Arg
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Glu Glu Gly Glu Val Thr Val Cys Phe Lys Met Lys His Asp Phe Lys
      420        425        430
Asn Leu Ala Ala Pro Ile Arg Pro Ile Glu Glu Ser Asp Gln Gly Thr
      435        440        445
Glu Val Ile Trp Leu Thr Gln His Val Glu Leu Ser Leu Gly Pro Leu
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Leu Pro
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&lt;210&gt; 5765

&lt;211&gt; 3220



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5765

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 3220

<210> 5766  
 <211> 873  
 <212> PRT  
 <213> Homo sapiens

<400> 5766  
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 20 25 30  
 Val Pro Leu Ala Cys Ala Trp Ser Cys Arg Asn Leu Ile Ala Phe Thr  
 35 40 45  
 Met Asp Leu Arg Ser Asp Asp Gln Asp Leu Thr Arg Met Ile His Ile  
 50 55 60  
 Leu Asp Thr Glu His Pro Trp Asp Leu His Ser Ile Pro Ser Glu His  
 65 70 75 80  
 His Glu Ala Ile Thr Cys Leu Glu Trp Asp Gln Ser Gly Ser Arg Leu  
 85 90 95  
 Leu Ser Ala Asp Ala Asp Gly Gln Ile Lys Cys Trp Ser Met Ala Asp  
 100 105 110  
 His Leu Ala Asn Ser Trp Glu Ser Ser Val Gly Ser Leu Val Glu Gly  
 115 120 125  
 Asp Pro Ile Val Ala Leu Ser Trp Leu His Asn Gly Val Lys Leu Ala  
 130 135 140  
 Leu His Val Glu Lys Ser Gly Ala Ser Ser Phe Gly Glu Lys Phe Ser  
 145 150 155 160  
 Arg Val Lys Phe Ser Pro Ser Leu Thr Leu Phe Gly Gly Lys Pro Met  
 165 170 175  
 Glu Gly Trp Ile Ala Val Thr Val Ser Gly Leu Val Thr Val Ser Leu  
 180 185 190  
 Leu Lys Pro Ser Gly Gln Val Leu Thr Ser Thr Glu Ser Leu Cys Arg  
 195 200 205  
 Leu Arg Gly Arg Val Ala Leu Ala Asp Ile Ala Phe Thr Gly Gly Gly  
 210 215 220  
 Asn Ile Val Val Ala Thr Ala Asp Gly Ser Ser Ala Ser Pro Val Gln  
 225 230 235 240  
 Phe Tyr Lys Val Cys Val Ser Val Val Ser Glu Lys Cys Arg Ile Asp  
 245 250 255  
 Thr Glu Ile Leu Pro Ser Leu Phe Met Arg Cys Thr Thr Asp Leu Asn  
 260 265 270  
 Arg Lys Asp Lys Phe Pro Ala Ile Thr His Leu Lys Phe Leu Ala Arg  
 275 280 285  
 Asp Met Ser Glu Gln Val Leu Leu Cys Ala Ser Ser Gln Thr Ser Ser  
 290 295 300  
 Ile Val Glu Cys Trp Ser Leu Arg Lys Glu Gly Leu Pro Val Asn Asn  
 305 310 315 320  
 Ile Phe Gln Gln Ile Ser Pro Val Val Gly Asp Lys Gln Pro Thr Ile  
 325 330 335  
 Leu Lys Trp Arg Ile Leu Ser Ala Thr Asn Asp Leu Asp Arg Val Ser

4932

770		775		780	
Gly Arg Ala Pro Thr	Leu Pro Gly Ser Ala	Ala Thr Leu Gln Leu Asp			
785	790	795	800		
Gly Leu Ala Arg Ala	Pro Gly Gln Pro Lys Ile Asp His Leu Arg Arg				
	805	810	815		
Leu His Leu Gly Ala Cys	Pro Thr Glu Glu Cys Lys Ala Cys Thr Arg				
	820	825	830		
Cys Gly Cys Val Thr Met	Leu Lys Ser Pro Asn Arg Thr Thr Ala Val				
	835	840	845		
Lys Gln Trp Glu Gln Arg	Trp Ile Lys Asn Cys Leu Cys Gly Gly Leu				
	850	855	860		
Trp Trp Arg Val Pro	Leu Ser Tyr Pro				
865	870				

&lt;210&gt; 5767

&lt;211&gt; 1910

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5767

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420
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480
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540
ctagaaaaga ctgtgaaaat atatatctca aaagagaaca aggcatagtc agaagggtca
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720
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1020

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 1910

&lt;210&gt; 5768

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5768

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Phe	Thr	Pro	Glu	Leu	Glu	Ser	Ile	Ile	Pro	Val	Pro	Ser	Asn	Lys	Thr
		20						25					30		
Thr	Cys	Glu	Asn	Trp	Arg	Glu	Ile	His	His	Leu	Val	Phe	His	Val	Ala
		35					40					45			
Asn	Ile	Cys	Phe	Ala	Val	Gly	Leu	Val	Ile	Pro	Thr	Thr	Leu	His	Leu
	50					55				60					
His	Met	Ile	Phe	Leu	Arg	Gly	Met	Leu	Thr	Leu	Gly	Cys	Thr	Leu	Tyr
65				70					75					80	
Ile	Val	Trp	Ala	Thr	Leu	Tyr	Arg	Cys	Ala	Leu	Asp	Ile	Met	Ile	Trp
		85						90						95	
Asn	Ser	Val	Phe	Leu	Gly	Val	Asn	Ile	Leu	His	Leu	Ser	Tyr	Leu	Leu
		100						105					110		
Tyr	Lys	Lys	Arg	Pro	Val	Lys	Ile	Glu	Lys	Glu	Leu	Ser	Gly	Met	Tyr
	115					120						125			
Arg	Arg	Leu	Phe	Glu	Pro	Leu	Arg	Val	Pro	Pro	Asp	Leu	Phe	Arg	Arg

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Leu Thr Gly Gln Phe Cys Met Ile Gln Thr Leu Lys Lys Gly Gln Thr				
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Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Asp Arg Leu Ser Ile Leu				160
	165		170	175
Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn				
	180		185	190
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln				
	195		200	205
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn				
	210		215	220
Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu				240
225		230		235
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp				
	245		250	255
Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys				
	260		265	270
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser				
	275		280	285
Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp				
	290		295	300
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His				
305		310		315
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu				
	325		330	335
Glu Gly Ala Glu Asp Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn				
	340		345	350
Thr Leu Lys Val His Gln Leu Pro				
	355		360	

&lt;210&gt; 5769

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5769

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180

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240

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300

cagtacagag ttgtacaaga ggaaaaccag gtaagttcta cgtgtgttta cctttattgg  
360

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420

cacgcgt

427

&lt;210&gt; 5770

<211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 5770  
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           20                  25                  30  
 Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg  
           35                  40                  45  
 Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val  
       50                  55                  60  
 Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp  
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 Leu Asn Ser Cys Ile  
                   85

<210> 5771  
 <211> 2539  
 <212> DNA  
 <213> Homo sapiens

<400> 5771  
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 240  
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 360  
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 420  
 ctctccaatg gctcctggag tggcagctca cttccttgcc tgccttgag atgttccaca  
 480  
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 780  
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 aatgcagtgg caactggaga ggcacacacc tatgaaagtg aagtgaaact cagatgtctg  
 900



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1980  
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2100  
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2160  
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2280  
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2520

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2539

&lt;210&gt; 5772

&lt;211&gt; 642

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5772

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          20          25          30
Val Arg Cys Ala Thr Pro Pro Gln Leu Ala Asn Gly Val Thr Glu Gly
          35          40          45
Leu Asp Tyr Gly Phe Met Lys Glu Val Thr Phe His Cys His Gly Leu
          50          55          60
His Leu Ala Arg Cys Ser Lys Thr His Leu Ser Val Arg Gly Asn Trp
          65          70          75          80
Asp Ala Glu Ile Pro Leu Cys Lys Pro Val Asn Cys Gly Pro Pro Glu
          85          90          95
Asp Leu Ala His Gly Phe Pro Asn Gly Phe Ser Phe Ile His Gly Gly
          100          105          110
His Ile Gln Tyr Gln Cys Phe Pro Gly Tyr Lys Leu His Gly Asn Ser
          115          120          125
Ser Arg Arg Cys Leu Ser Asn Gly Ser Trp Ser Gly Ser Ser Pro Ser
          130          135          140
Cys Leu Pro Cys Arg Cys Ser Thr Pro Val Ile Glu Tyr Gly Thr Val
          145          150          155          160
Asn Gly Thr Asp Phe Asp Cys Gly Lys Ala Ala Arg Ile Gln Cys Phe
          165          170          175
Lys Gly Phe Lys Leu Leu Gly Leu Ser Glu Ile Thr Cys Glu Ala Asp
          180          185          190
Gly Gln Trp Ser Ser Gly Phe Pro His Cys Glu His Thr Ser Cys Gly
          195          200          205
Ser Leu Pro Met Ile Pro Asn Ala Phe Ile Ser Glu Thr Ser Ser Trp
          210          215          220
Lys Glu Asn Val Ile Thr Tyr Ser Cys Arg Ser Gly Tyr Val Ile Gln
          225          230          235          240
Gly Ser Ser Asp Leu Ile Cys Thr Glu Lys Gly Val Trp Asn Gln Pro
          245          250          255
Tyr Pro Val Cys Glu Pro Leu Ser Cys Gly Ser Pro Pro Ser Val Ala
          260          265          270
Asn Ala Val Ala Thr Gly Glu Ala His Thr Tyr Glu Ser Glu Val Lys
          275          280          285
Leu Arg Cys Leu Glu Gly Tyr Thr Met Asp Thr Asp Thr Asp Thr Ile
          290          295          300
Thr Cys Gln Lys Asp Gly Arg Trp Phe Pro Glu Arg Ile Ser Cys Ser
          305          310          315          320
Pro Lys Lys Cys Pro Leu Pro Glu Asn Ile Thr His Ile Leu Val His
          325          330          335
Gly Asp Asp Phe Ser Val Asn Arg Gln Val Ser Val Ser Cys Ala Glu
          340          345          350
Gly Tyr Thr Phe Glu Gly Val Asn Ile Ser Val Cys Gln Leu Asp Gly

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Thr Trp Glu Pro Pro Phe Ser Asp Glu Ser Cys Ser Pro Val Ser Cys
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Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr
  385      390      395      400
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu
      405      410      415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly
      420      425      430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe
      435      440      445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val
      450      455      460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala
      465      470      475      480
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys
      485      490      495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu
      500      505      510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg
      515      520      525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp
      530      535      540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly
      545      550      555      560
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln
      565      570      575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu
      580      585      590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro
      595      600      605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His
      610      615      620
Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala
      625      630      635      640
Pro Leu

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&lt;210&gt; 5773

&lt;211&gt; 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5773

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180
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240
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300

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 420  
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<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

Xaa	Arg	Val	Arg	Gly	Leu	Arg	Arg	Ala	Val	Arg	Ala	Ser	Pro	Gly	Arg
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			20					25					30		
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35					40					45			
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
	50					55					60				
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65					70				75					80	
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
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<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 180  
 atgcctaagg tgctctccca gccgtccgac ctggatctcc aagacgtaga ggaagtggag  
 240  
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 660  
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 720  
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 780  
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 960  
 cgctcgcact tcttccggca caaccgcaca cacacgggcg agaagcccta cactgcctc  
 1020  
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 1080  
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 a  
 1441

&lt;210&gt; 5776

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5776

Met	Gly	Ile	Asn	Met	Pro	Lys	Val	Leu	Ser	Gln	Pro	Ser	Asp	Leu	Asp
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Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
		20					25						30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
	35					40					45				
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
	50				55				60						
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65			70					75						80	
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
			85				90						95		
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

Pro	Glu	Gly	Ala	Pro	Glu	Arg	Ala	Ala	Glu	Leu	Gly	Val	Asn	Phe	Gly
		115					120					125			
Arg	Ser	Arg	Gln	Gly	Ser	Ala	Arg	Gly	Thr	Lys	Pro	His	Arg	Cys	Glu
	130					135					140				
Ala	Cys	Gly	Lys	Ser	Phe	Lys	Tyr	Asn	Ser	Leu	Leu	Lys	His	Gln	
145					150					155				160	
Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ala	Cys	His	Glu	Cys	Gly	Lys
			165						170					175	
Cys	Phe	Ala	Ala	Ala	Ser	Arg	Phe	Ile	Gln	His	Gln	Arg	Ile	His	Ser
		180					185					190			
Gly	Glu	Lys	Pro	Tyr	Ala	Cys	Pro	Glu	Cys	Ser	Lys	Thr	Phe	Thr	Arg
	195					200						205			
Ser	Ser	Asn	Leu	Ile	Lys	His	Gln	Val	Ile	His	Ser	Gly	Glu	Arg	Pro
	210					215					220				
Phe	Ala	Cys	Gly	Asp	Cys	Gly	Lys	Leu	Phe	Arg	Arg	Ser	Phe	Ala	Leu
225				230						235				240	
Leu	Glu	His	Ala	Arg	Val	His	Ser	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Ser
			245						250					255	
Asp	Cys	Gly	Lys	Cys	Phe	Arg	Gly	Arg	Ser	His	Phe	Phe	Arg	His	Asn
	260						265						270		
Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	His	Cys	Leu	Asp	Cys	Gly	Lys
	275						280					285			
Ser	Phe	Ser	His	Ser	Ser	His	Leu	Ile	Lys	His	Gln	Arg	Thr	His	Arg
	290					295					300				
Gly	Val	Arg	Pro	Tyr	Ala	Cys	Pro	Leu	Cys	Gly	Lys	Ser	Phe	Ser	Arg
305					310					315				320	
Arg	Ser	Asn	Leu	His	Arg	His	Glu	Lys	Ile	His	Thr	Thr	Gly	Pro	Lys
			325						330					335	
Ala	Leu	Ala	Met	Leu	Met	Leu	Gly	Ala	Ala	Ala	Ala	Gly	Ala	Leu	Ala
		340					345					350			
Thr	Pro	Pro	Pro	Ala	Pro	Thr									
		355													

&lt;210&gt; 5777

&lt;211&gt; 1431

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5777

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120

tgcgtgcggc ctgcctcaag caaccaggta cgtaggctcg cgcccagct cggcgctgcg  
180

gtgggagccg gagggcgaca gtcagagccg gggtgccagc gggacgcgac cgccagatcc  
240

acttaggacc ccgtcggttct ggaagcggc cacgtctgag tcccggggcc tcctcgtgct  
300

gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgctgcccgt  
360

gatcaccgac tggcccttgt aagcaccttc gcagcaggaa gccagagct gcgcctgccc  
420

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 720  
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 780  
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 1200  
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 1431

&lt;210&gt; 5778

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5778

Met	Leu	Thr	Leu	Lys	Gly	Ser	Ser	Asp	Arg	Pro	Gln	Met	Gly	Met	Gly
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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
			20					25					30		
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
		35					40					45			
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
	50					55					60				
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65					70				75					80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85					90						95	
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro





<210> 5781  
 <211> 845  
 <212> DNA  
 <213> Homo sapiens

<400> 5781  
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 120  
 ccaccaggtg aggatggcac tgcaacatct tccactgagg ctccagctgc cctctcaggt  
 180  
 acatcagggc ctgganctgc ctctctcca ggagggccag gactcggccc cctgccagcc  
 240  
 cccgaagcat tgcagccagg agtgcagcgt gggggccctg caggccatgg ccaggcccca  
 300  
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 360  
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 420  
 gggcagccgc ctcttggccc ctgatgttca gccacagact cctcccgtca tgggcgaggt  
 480  
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 ctctgggctc cgtgggacag gcctctccga acagccacat ccagggtggc tgctgcagca  
 720  
 gaggtggag tggctgctat accactgttc acctgtggga tgaataaaca gtggagaatg  
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 840  
 ctctg  
 845

<210> 5782  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 5782  
 Gly Val Pro Cys Pro Lys Ile Glu Gly Ala Val Gly Leu Gly Ser Gly  
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 Ser Arg Pro Arg Gly Ala Gly Val Arg Cys His Phe Cys Gly Val Asn  
 20 25 30  
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala  
 35 40 45  
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro  
 50 55 60  
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala  
 65 70 75 80  
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

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<400> 5783
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120
gctgggactc tccttcttag tacacaccga ctgatttgga gagatcagaa aaatcatgag
180
tgttgcatgg ccattctcct ttcccaaatt gtgttcattg aagaacaggc ggctggaatt
240
gggaagagtg ccaaaatagt ggttcattct caccagctc ctccctaaca agaacctggc
300
ccattccaga gtagtaagaa ctctacatc aaactctcct tcaaagaaca tggccagatt
360
gagttttaca ggcgtttatc agaggaaatg acacaaagaa gatggggagaa tatgccagtt
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480
gtaggtattg aaaggaaact ggaagaaaaa agaaaagaaa ctgacaaaaa catttctgag
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660
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780
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840
cgaggaatgg aattgctctc accagaagat ttagtgaatg cgtgcaagat gctggaagca
900
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960
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1020
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1080
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1140

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 1260  
 attgagaatt tattggaact tcacagtgca atgtaaatct cttttaattt ctccccaat  
 1320  
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 1380  
 tgaatttaaa atcatgctat agtgcagaac cctcagagtt taacttggaa tatagtggat  
 1440  
 ttttaacttga tcctcaaactc taatcatttt ataaagaagg gaatttagtt ttgcagagaa  
 1500  
 taaaaagaga agttgcatgt tcagacaggt tagattatta ttttgggtga actgaaattc  
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 1620  
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 1680  
 aaaaatgaaa taattttatt tgacacatta tttatatata ttctatctag gtttctcttt  
 1740  
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 1800  
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 1839

&lt;210&gt; 5784

&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5784

Met	Asp	Arg	Phe	Val	Trp	Thr	Ser	Gly	Leu	Leu	Glu	Ile	Asn	Glu	Thr
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Leu	Val	Ile	Gln	Arg	Gly	Val	Arg	Ile	Tyr	Asp	Gly	Glu	Glu	Lys	
			20					25				30			
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile
		35					40					45			
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
		50				55					60				
Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
65					70					75				80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
				85					90					95	
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
			100					105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120					125			
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
		130				135					140				
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145					150					155					160
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
			165					170					175		
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

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<210> 5785
<211> 785
<212> DNA
<213> Homo sapiens
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120
ccttggccat ggcagcttgg ttgggacagc cgggccaaagg gaaaaaaagg tgcaaaagtc
180
caaatgctgg cacttcaggt gtggccggca cccagccagg cgcagtgggt gggcagggcg
240
ccatgcttct ctcttgga caggtcggcc gtgtagcagc gccccctccc agcagccact
300
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420
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480
caaagcggac attctccttg tgggccagtg tgtaggtctc ctgggtcccc tggaggggatg
540
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600

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tcgacagggg ccaggggtccc agcggtcg cgagagctgc gcccgtggg gctgcaaggt  
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 780  
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 785

<210> 5786  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 5786  
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 Arg Ser His Ala Ala Ala Gly Glu Gly Pro Ala Pro Gly Ala Pro Glu  
 20 25 30  
 Lys Pro Ala Ala Arg Ala Ala Asp Leu Ala Ala Pro Ala Gly Ala Ala  
 35 40 45  
 Leu Ala Gln Pro Leu Gly Pro Trp Pro Leu Ser Ser Ala Gly Pro Arg  
 50 55 60  
 Leu Val Phe Asn Arg Val Asn Arg Arg Arg Asp Pro Ser Lys Ser Pro  
 65 70 75 80  
 Ser Leu Gln Gly Thr Gln Glu Thr Tyr Thr Leu Ala His Lys Glu Asn  
 85 90 95  
 Val Arg Phe Val Ser Glu Ala Trp Gln Gln Val Gln Gln Gln Leu Asp  
 100 105 110  
 Gly Gly Pro Ala Gly Glu Gly Gly Pro Arg Pro Val Gln Tyr Val Glu  
 115 120 125  
 Arg Thr Pro Asn Pro Arg Leu Gln Asn Phe Val Pro Ile Asp Leu Asp  
 130 135 140  
 Glu Trp Trp Ala Gln Gln Phe Leu Ala Arg Ile Thr Ser Cys Ser  
 145 150 155

<210> 5787  
 <211> 1683  
 <212> DNA  
 <213> Homo sapiens

<400> 5787  
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 ccngggcgag gaggattctg ggagttggag gccgaggctg cgaccngcag gcgcaaacct  
 180  
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 240  
 ggtcctgtga gggggccctt gcaagattcc agctggtatg agccttctgc agagctagt  
 300  
 cagactagga tggctgtatc actaacagca gctgaaactc tggcccttca gggtaacag  
 360

ggacaagaga agatgatgat gatgggacca aaggaagagg aacagtcttg tgagtatgag  
420  
accaggctac ctgggaacca ctctaccagt caagagatct tccgccaacg cttcaggcat  
480  
ctccgctacc aggagactcc tgggtccccg gaggccttga gccaaactacg agtactctgc  
540  
tgtgagtggc tgaggccaga gaaacacacg aaggagcaga tcctggagtt cctggtgctg  
600  
gaacaattct tgaccatcct gcctgaggag ctccaatcct ggggtgcgggg acatcacccct  
660  
aagagtggag aggaggctgt gactgtgctg gaggatttag agaaaggact tgaaccagag  
720  
ccgcaggtcc caggccctgc acatggacct gcacaggaag agccatggga gaagaaggaa  
780  
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840  
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960  
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&lt;210&gt; 5788

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5788

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&lt;210&gt; 5791

&lt;211&gt; 3285

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5791

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 <213> Homo sapiens

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&lt;210&gt; 5796

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5796

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100

105

&lt;210&gt; 5799

&lt;211&gt; 4261

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5799

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&lt;210&gt; 5800

&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5800

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&lt;210&gt; 5802

&lt;211&gt; 350

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5802

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Phe	Glu	Lys	Val	Pro	Leu	Phe	Met	Ser	Arg	Ala	Pro	Ser	Glu	Ile	Asp
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			325						330					335	
Arg	Ala	Pro	Cys	Tyr	Arg	Phe	Tyr	Ser	Thr	Arg	Gly	Thr	Leu		
		340						345					350		

&lt;210&gt; 5803

&lt;211&gt; 692

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5803

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120



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&lt;210&gt; 5806

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5806

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Lys	Met	Thr	Glu	Val	Met	Met	Asn	Thr	Gln	Pro	Met	Glu	Glu	Ile	Gly
			20					25					30		
Leu	Ser	Pro	Arg	Lys	Asp	Gly	Leu	Ser	Tyr	Gln	Ile	Phe	Pro	Asp	Pro
		35				40					45				
Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
	50					55				60					
Val	Val	Glu	Pro	Thr	Glu	Gly	Glu	Val	Glu	Ser	Gly	Glu	Leu	Arg	Trp
65					70				75					80	
Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
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105

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<213> Homo sapiens

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<210> 5808

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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Ala	Glu	Arg	Val	Lys	Ala	Trp	Thr	Ser	Arg	Tyr	Phe	Gly	Val	Leu	Gln	85	90	95	
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Ala	Glu	Leu	Met	Gly	Leu	Lys	Gln	Val	Tyr	Tyr	His	Val	Leu	Gly	Leu	165	170	175	
Gly	Glu	Pro	Leu	Ala	Leu	Lys	Ser	Pro	Arg	Ala	Leu	Arg	Leu	Phe	Ser	180	185	190	
His	Leu	Arg	His	Pro	Val	Cys	Val	Glu	Leu	Leu	Thr	Val	Leu	Trp	Val	195	200	205	
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Leu	Tyr	Leu	Gly	Leu	Ala	His	Gly	Leu	Asp	Gln	Gln	Asp	Leu	Arg	Tyr	225	230	235	240
Leu	Arg	Ala	Gln	Leu	Gln	Arg	Lys	Leu	His	Leu	Leu	Ser	Arg	Pro	Gln	245	250	255	
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<211> 2009

<212> DNA

<213> Homo sapiens

<400> 5809

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 <212> PRT  
 <213> Homo sapiens

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&lt;210&gt; 5812

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5812

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Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
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      180              185              190
Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu
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Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg
      210              215              220
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225              230              235              240
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      260              265              270
Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly
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Lys Gln Glu Glu Asn Asp Val Val Glu Lys Leu Asn Leu Phe Leu Asp
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&lt;210&gt; 5813

&lt;211&gt; 2991

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5813

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&lt;210&gt; 5814

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5814

Ala	Ser	Ser	Glu	Glu	Leu	Lys	Ala	Ala	Tyr	Arg	Arg	Leu	Cys	Met	Leu
1				5					10				15		
Tyr	His	Pro	Asp	Lys	His	Arg	Asp	Pro	Glu	Leu	Lys	Ser	Gln	Ala	Glu
			20					25				30			
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro

```

      35      40      45
Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met
  50      55      60
Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg
  65      70      75      80
Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln
      85      90      95
Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
      100      105      110
Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
      115      120      125
Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro
      130      135      140
Val Ser His Glu His
145

```

&lt;210&gt; 5815

&lt;211&gt; 590

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5815

```

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590

```

&lt;210&gt; 5816

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5816

```

Phe Ile Gln Ala Ala Leu Gly Asp Gln Pro Arg Asp Ile Leu Cys Gly
  1      5      10      15
Ala Ala Asp Glu Val Leu Ala Val Leu Lys Asn Glu Lys Leu Arg Asp
      20      25      30
Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

```

```
<210> 5818
<211> 191
<212> PRT
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&lt;213&gt; Homo sapiens

&lt;400&gt; 5818

```

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Ser Arg Gln Cys Ser Trp Asp Lys Ser Glu Ser Pro Gln Arg Ser Ser
          20          25          30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
          35          40          45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
          50          55          60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65          70          75          80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
          85          90          95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
          100         105         110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
          115         120         125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
          130         135         140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145         150         155         160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
          165         170         175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
          180         185         190

```

&lt;210&gt; 5819

&lt;211&gt; 1652

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5819

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600

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 1620  
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 1652

&lt;210&gt; 5820

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5820

Met Ala Leu Leu Arg Lys Ile Asn Gln Val Leu Leu Phe Leu Leu Ile  
 1 5 10 15  
 Val Thr Leu Cys Val Ile Leu Tyr Lys Lys Val His Lys Gly Thr Val  
 20 25 30  
 Pro Lys Asn Asp Ala Asp Asp Glu Ser Glu Thr Pro Glu Glu Leu Glu  
 35 40 45  
 Glu Glu Ile Pro Val Val Ile Cys Ala Ala Ala Gly Arg Met Gly Ala  
 50 55 60  
 Thr Met Ala Ala Ile Asn Ser Ile Tyr Ser Asn Pro Asp Ala Asn Ile  
 65 70 75 80  
 Leu Phe Tyr Val Val Gly Leu Arg Asn Thr Leu Thr Arg Ile Arg Lys

```
<210> 5821
<211> 3292
<212> DNA
<213> Homo sapiens
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4983

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780  
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 3292

&lt;210&gt; 5822

&lt;211&gt; 712

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5822

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Ser	Ser	Ser	Ala	Asn	Glu	Asp	Asp	Glu	Val	Phe	Phe	Gly	Pro	Phe	Gly
			20					25					30		
His	Lys	Glu	Arg	Cys	Ile	Ala	Ala	Ser	Leu	Glu	Leu	Asn	Asn	Pro	Val
		35					40					45			
Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
	50					55					60				
Pro	Leu	Ala	Gly	Glu	Lys	Phe	Val	Glu	Val	Tyr	Lys	Glu	Ala	His	Leu
65					70					75				80	
Leu	Ala	Leu	His	Ile	Glu	Ser	Ser	Ser	Arg	Asn	Gln	Ala	Ala	Gln	Ala
				85					90					95	
Ala	Lys	Pro	Glu	Asp	Pro	Arg	Ser	Gln	Gly	Val	Glu	Arg	Phe	Ile	Gln

4986

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545	550	555
Ser Arg Leu Val Asp	Val Ser Pro Asp Arg Gly Ser	Pro Pro Ser Arg
565	570	575
Val Pro Gln Ala Leu	Asn Phe Ser Pro Glu Glu Ser	Asp Ser Thr Phe
580	585	590
Ser Lys Ser Thr Ala	Thr Glu Val Ala Arg Glu Glu	Ala Lys Pro Gly
595	600	605
Gly Asp Ala Ala Pro	Ser Glu Ala Leu Leu Val Asp	Ile Lys Leu Glu
610	615	620
Pro Leu Ala Val Thr	Pro Asp Ala Ala Ser Gln	Pro Leu Ile Asp Leu
625	630	635
Pro Leu Ile Asp Phe	Cys Asp Thr Pro Glu Ala His	Val Ala Val Gly
645	650	655
Ser Glu Ser Arg Pro	Leu Ile Asp Leu Met Thr Asn	Thr Pro Asp Met
660	665	670
Asn Lys Asn Val Ala	Lys Pro Ser Pro Val Val Gly	Gln Leu Ile Asp
675	680	685
Leu Ser Ser Pro Leu	Ile Gln Leu Ser Pro Glu Ala	Asp Lys Glu Asn
690	695	700
Val Asp Ser Pro Leu	Leu Lys Phe	
705	710	

&lt;210&gt; 5823

&lt;211&gt; 2585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5823

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720

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<213> Homo sapiens

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 His Trp His Pro Phe Glu Pro Asn Asn Phe Arg Asp Ser Leu Glu Asp  
 465 470 475 480  
 Cys Val Thr Ile Trp Gly Pro Glu Gly Arg Trp Asn Asp Ser Pro Cys  
 485 490 495  
 Asn Gln Ser Leu Pro Ser Ile Cys Lys Lys Ala Gly Gln Leu Ser Gln  
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 Gly Ala Ala Glu Glu Asp His Gly Cys Arg Lys Gly Trp Thr Trp His  
 515 520 525  
 Ser Pro Ser Cys Tyr Trp Leu Gly Glu Asp Gln Val Thr Tyr Ser Glu  
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 625 630 635 640  
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 740 745 750  
 Pro Arg Gly Gly Gln Ser Trp Arg Trp Ser Asp Gly Val Gly Phe Ser  
 755 760 765  
 Tyr His Asn Phe Asp Arg Ser Arg His Asp Asp Asp Ile Arg Gly  
 770 775 780  
 Cys Ala Val Leu Asp Leu Ala Ser Leu Gln Trp Val Ala Met Gln Cys

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Gln Glu Ala Glu Tyr Lys Phe Phe Glu His His Ser Thr Trp Ala Gln
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Arg Ala Gln Glu Gln His Trp Trp Ile Gly Leu His Thr Ser Glu Ser
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Trp Ala Pro Gly Lys Pro Arg Pro Val Gly Lys Asp Lys Lys Cys Val
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Tyr Met Thr Ala Ser Arg Glu Asp Trp Gly Asp Gln Arg Cys Leu Thr
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Pro Pro Asp Leu Pro Thr Thr Ala Leu Gly Gly Cys Pro Ser Asp Trp
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 <212> DNA  
 <213> Homo sapiens

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1980  
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2040



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<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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Ala	Val	His	His	Ile	Ile	His	Asp	Phe	Gln	Pro	His	Val	Ile	Val	His
65				70					75						80
Cys	Ala	Ala	Glu	Arg	Arg	Pro	Asp	Val	Val	Glu	Asn	Gln	Pro	Asp	Ala
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Asn	Leu	Tyr	Gly	Lys	Thr	Lys	Leu	Asp	Gly	Glu	Lys	Ala	Val	Leu	Glu
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Asn	Asn	Leu	Gly	Ala	Ala	Val	Leu	Arg	Ile	Pro	Ile	Leu	Tyr	Gly	Glu
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Val	Glu	Lys	Leu	Glu	Glu	Ser	Ala	Val	Thr	Val	Met	Phe	Asp	Lys	Val
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Gln	Phe	Ser	Asn	Lys	Ser	Ala	Asn	Met	Asp	His	Trp	Gln	Gln	Arg	Phe
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Pro	Thr	His	Val	Lys	Asp	Val	Ala	Thr	Val	Cys	Arg	Gln	Leu	Ala	Glu
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Lys	Arg	Met	Leu	Asp	Pro	Ser	Ile	Lys	Gly	Thr	Phe	His	Trp	Ser	Gly
225				230						235					240
Asn	Glu	Gln	Met	Thr	Lys	Tyr	Glu	Met	Ala	Cys	Ala	Ile	Ala	Asp	Ala
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Phe	Asn	Leu	Pro	Ser	Ser	His	Leu	Arg	Pro	Ile	Thr	Asp	Ser	Pro	Val
		260						265					270		
Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp	Cys	Ser	Lys	Leu
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Glu	Thr	Leu	Gly	Ile	Gly	Gln	Arg	Thr	Pro	Phe	Arg	Ile	Gly	Ile	Lys
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Phe	His														

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 <212> DNA  
 <213> Homo sapiens

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<210> 5834  
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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val  
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<213> Homo sapiens
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180
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<210> 5840  
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 <213> Homo sapiens

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 Cys Phe Lys Ala Asn Ile Pro Val Pro Asn Val Leu Cys Gly Leu Asn  
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 Pro Gly Arg Gly Gln Gly His Ile Gln Val Gly Leu Ala Ser Ser Thr  
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<210> 5841  
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 <212> DNA  
 <213> Homo sapiens

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&lt;213&gt; Homo sapiens

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&lt;211&gt; 6446

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5843

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&lt;210&gt; 5846

&lt;211&gt; 257

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5846

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			20					25					30		
Gln	Gln	Glu	Lys	Glu	Trp	Leu	Leu	Ala	Glu	Glu	Thr	Ala	Ala	Thr	Ala
			35				40					45			
Ser	Ala	Ile	Glu	Ala	Met	Lys	Lys	Ala	Tyr	Gln	Glu	Glu	Leu	Ser	Arg
	50					55				60					
Glu	Leu	Ser	Lys	Thr	Arg	Ser	Leu	Gln	Gln	Gly	Pro	Asp	Gly	Leu	Arg
65					70					75				80	
Lys	Gln	His	Gln	Ser	Asp	Val	Glu	Ala	Leu	Lys	Arg	Glu	Leu	Gln	Val
			85					90						95	
Leu	Ser	Glu	Gln	Tyr	Ser	Gln	Lys	Cys	Leu	Glu	Ile	Gly	Ala	Leu	Met
			100					105					110		
Arg	Gln	Ala	Glu	Glu	Arg	Glu	His	Thr	Leu	Arg	Arg	Cys	Gln	Gln	Glu
		115					120					125			
Gly	Gln	Glu	Leu	Leu	Arg	His	Asn	Gln	Glu	Leu	His	Gly	Arg	Leu	Ser
		130				135						140			
Glu	Glu	Ile	Asp	Gln	Leu	Arg	Gly	Phe	Ile	Ala	Ser	Gln	Gly	Met	Gly
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Asn	Gly	Cys	Gly	Arg	Ser	Asn	Glu	Arg	Ser	Ser	Cys	Glu	Leu	Glu	Val
			165					170						175	
Leu	Leu	Arg	Val	Lys	Glu	Asn	Glu	Leu	Gln	Tyr	Leu	Lys	Lys	Glu	Val
			180					185					190		
Gln	Cys	Leu	Arg	Asp	Glu	Leu	Gln	Met	Met	Gln	Lys	Asp	Lys	Arg	Phe
		195				200						205			
Thr	Ser	Gly	Lys	Tyr	Gln	Asp	Val	Tyr	Val	Glu	Leu	Ser	His	Ile	Lys

210		215		220
Thr Arg Ser Glu Arg	Glu Ile Glu Gln Leu Lys	Glu His Leu Arg Leu		
225	230	235	240	
Ala Met Ala Ala Leu	Gln Glu Lys Glu Ser Met	Arg Asn Ser Leu Ala		
	245	250	255	

Glu

<210> 5847  
 <211> 1021  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
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 420  
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 1021

<210> 5848  
 <211> 120  
 <212> PRT

<213> Homo sapiens

<400> 5848

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      20           25           30
Leu Ser Arg His Thr Val Lys Pro Arg Ala Leu Ser Thr Phe Leu Phe
      35           40           45
Gly Ser Ile Arg Gly Ala Ala Pro Val Ala Val Glu Pro Gly Ala Ala
      50           55           60
Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
      65           70           75           80
Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
      85           90           95
Tyr Leu Val Lys Arg Arg Gly Arg Trp Tyr Val Tyr Cys Lys Thr His
      100          105          110
Pro Arg His Lys Gln Arg Gln Met
      115          120

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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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120
aaaaatctca agaccacagg acagcgtgag cccaccccc ctcccccaat gaccccagca
180
tgcggtaatg ccaggcgggt ggccccctggg catgcggggg ggagtgatgc atggaaggaa
240
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480
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720
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840

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960  
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&lt;210&gt; 5850

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5850

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His	Ser	Val	Pro	Ala	Tyr	Pro	Trp	Asp	Trp	Gly	His	Leu	Ile	Arg	Phe
			20					25					30		
Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
		35				40						45			
Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
	50					55				60					
Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
65					70					75				80	
Gly	Leu	Ser	Pro	Val	Pro	Gly	Val	Gly	Gly	Arg	Gln	Cys	Pro	Gly	Thr
				85				90						95	
Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
			100					105					110		
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
		115				120						125			
Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
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Gln	Arg	Thr	Leu	Thr	Pro	Pro	Arg	Gly	Ala						
145						150									

&lt;210&gt; 5851

&lt;211&gt; 488

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5851

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180
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480
tgacgcgt
488

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&lt;210&gt; 5852

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5852

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Met Trp Lys Gly Leu Val Lys Arg Asn Ala Ser Val Glu Thr Val Asp
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Asn Lys Thr Ser Glu Asp Val Thr Met Ala Ala Ala Ser Pro Val Thr
      20           25           30
Leu Thr Lys Gly Thr Ser Ala Ala His Leu Asn Ser Met Glu Val Thr
      35           40           45
Thr Glu Asp Thr Ser Arg Thr Asp Ala Tyr Glu Ser Tyr Lys Lys Lys
      50           55           60
Asp Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser
65           70           75           80
Glu Met

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&lt;210&gt; 5853

&lt;211&gt; 487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5853

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120
tcaggcccag cagctccatg gaggacgccg gcgaggaccc caccacgttt gctgcccact
180

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 360  
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<210> 5854  
 <211> 68  
 <212> PRT  
 <213> Homo sapiens

<400> 5854  
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 20 25 30  
 Thr Pro Ser Gly Arg Ser Gly Pro Ala Ala Pro Trp Arg Thr Pro Ala  
 35 40 45  
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 Ser Trp Pro Leu  
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<210> 5855  
 <211> 362  
 <212> DNA  
 <213> Homo sapiens

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 180  
 taacgaggtt gttgcagaag tcctcctggc ggcacacgaa ggtgtaggag atcagggaga  
 240  
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 an  
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<210> 5856  
 <211> 113  
 <212> PRT



<213> Homo sapiens

<400> 5856

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Val Thr Ala Pro Leu Cys Ser Ala Asp Pro Leu Leu Ala Val Pro Pro
 20          25          30
Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
 35          40          45
Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
 50          55          60
His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
 65          70          75          80
Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
 85          90          95
His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
 100          105          110
Ala

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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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 180
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&lt;210&gt; 5858

&lt;211&gt; 434

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5858

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Gly	Gly	Gln	Gly	Arg	Gly	Gly	Glu	Lys	Pro	Pro	His	Leu	Ala	Ala	Leu
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Asp	Ser	Gly	Ala	Phe	Gln	Ser	Val	Trp	Val	Ser	Thr	Asp	His	Asp	Glu
				85					90					95	
Ile	Glu	Asn	Val	Ala	Lys	Gln	Phe	Gly	Ala	Gln	Val	His	Arg	Arg	Ser
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Ser	Glu	Val	Ser	Lys	Asp	Ser	Ser	Thr	Ser	Leu	Asp	Ala	Ile	Ile	Glu

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 370 375 380  
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&lt;210&gt; 5859

&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5859

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<210> 5860  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 5860  
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 35 40 45  
 Gln Met Gly Leu Gly Arg Cys Arg Phe Cys Phe Ser Pro Trp Leu Pro  
 50 55 60  
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<210> 5861  
 <211> 1951  
 <212> DNA  
 <213> Homo sapiens

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<210> 5862  
 <211> 514  
 <212> PRT  
 <213> Homo sapiens

<400> 5862  
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 Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu  
 50 55 60  
 Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile  
 65 70 75 80  
 Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met  
 85 90 95  
 Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr  
 100 105 110  
 Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr  
 115 120 125  
 Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu  
 130 135 140  
 Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His  
 145 150 155 160  
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 165 170 175  
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 180 185 190  
 Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala  
 195 200 205  
 Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala  
 210 215 220  
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 225 230 235 240  
 Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr  
 245 250 255  
 Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala  
 260 265 270  
 Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly  
 275 280 285  
 Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile  
 290 295 300  
 Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln  
 305 310 315 320  
 Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg  
 325 330 335  
 Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn  
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Ser Thr Tyr Asn Thr Glu Met Leu Met Ser Glu Leu Ser Pro Glu Asp
      405      410      415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
      420      425      430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
      435      440      445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
      450      455      460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
465      470      475      480
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
      485      490      495
Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr Leu
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Lys Val

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&lt;210&gt; 5863

&lt;211&gt; 438

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5863

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438

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&lt;210&gt; 5864

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5864

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Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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<212> DNA
<213> Homo sapiens
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1140

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 <212> PRT  
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 35 40 45  
 Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile Glu Glu Leu  
 50 55 60  
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 Trp Arg Arg Ser Arg Ala Ser Ala Ile Ala Ala Gly Val His Pro Gln  
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 Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu  
 100 105 110  
 Lys Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr  
 115 120 125  
 Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro  
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 145 150 155 160  
 Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg  
 165 170 175  
 Lys Lys Leu Ser Ser Ser Cys Arg Lys Ala Lys Arg Ala Lys Ser Gln  
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<210> 5867  
 <211> 1882  
 <212> DNA  
 <213> Homo sapiens

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His	Val	Phe	Gly	Ser	Ala	Ala	Asn	Leu	Phe	Ser	Cys	Ala	Ile	Asp	Gln
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Ser	Ser	Leu	Gln	Tyr	Gln	Ile	Gln	Ser	Val	Val	Arg	Met	Lys	Cys	Gly
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<210> 5871

<211> 2217

<212> DNA

<213> Homo sapiens

<400> 5871

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<212> PRT

<213> Homo sapiens

<400> 5872

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&lt;210&gt; 5873

&lt;211&gt; 3463

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5873

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&lt;400&gt; 5876

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Phe	Gly	Cys	Val	Asn	Ala	Ile	Glu	Phe	Ser	Asn	Asn	Gly	Gly	Gln	Trp
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Gln	Ala	Ile	His	Ser	Arg	Val	Lys	Pro	Ile	Gln	Leu	Lys	Gly	Glu	His
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His	Ser	Asn	Ile	Phe	Cys	Leu	Ala	Phe	Asn	Ser	Gly	Asn	Thr	Lys	Val
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Phe	Ser	Gly	Gly	Asn	Asp	Glu	Gln	Val	Ile	Leu	His	Asp	Val	Glu	Ser
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Phe	Cys	Trp	Ala	Asn	Tyr	Pro	Ser	Ala	Phe	His	Ser	Val	Met	Phe	Asn
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Pro	Val	Glu	Pro	Arg	Leu	Leu	Ala	Pro	Ala	Asn	Ser	Lys	Glu	Gly	Val
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<210> 5879

<211> 1555

<212> DNA

<213> Homo sapiens

&lt;400&gt; 5879

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<210> 5880  
 <211> 185  
 <212> PRT  
 <213> Homo sapiens

<400> 5880  
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 Gly Ser Gln Lys Lys Lys Arg Thr Ile Leu Gln Phe Leu Thr Asn Tyr  
 35 40 45  
 Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met  
 50 55 60  
 Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln  
 65 70 75 80  
 His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly  
 85 90 95  
 Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly  
 100 105 110  
 His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala  
 115 120 125  
 Val Asp Ala Gly Asp Cys Asp Ile Asn Tyr Glu Gly Leu Asp Asn Leu  
 130 135 140  
 Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr  
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 <211> 327  
 <212> DNA  
 <213> Homo sapiens

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<210> 5882  
 <211> 109  
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<213> Homo sapiens

<400> 5882

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Ala Lys Glu Asn Met Val Thr Phe Ser His Thr Leu Pro Arg Ala Ser
      35           40           45
Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
      50           55           60
Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
      65           70           75           80
Lys Ser Leu Glu Gly Arg Gly Leu Gly Leu Pro Asp Asp Ala Ser Pro
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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5883

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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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&lt;210&gt; 5885

&lt;211&gt; 1905

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5885

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&lt;210&gt; 5886

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5886

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			20					25					30		
Gly	Ala	Gly	Pro	Leu	Tyr	Ser	His	His	Leu	Pro	Thr	Ser	Pro	Leu	Gln
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Lys	Ala	Leu	Leu	Ala	Ala	Gly	Ser	Ala	Ala	Met	Ala	Leu	Tyr	Asn	Pro
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Thr	Leu	Lys	Val	Leu	Arg	Asp	Gln	Met	Arg	Arg	Asp	Pro	Glu	Gly	Ala
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Gln	Ile	Leu	Gln	Glu	Arg	Pro	Arg	Ile	Ser	Thr	Ser	Thr	Leu	Asp	Leu
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Gly	Lys	Leu	Gln	Ser	Leu	Pro	Glu	Gly	Ser	Leu	Gly	Arg	Glu	Tyr	Leu
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1080

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&lt;210&gt; 5888

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5888

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 35 40 45  
 Glu Thr Lys His Arg Val Ser Met Glu Val Ala Ala Ala Lys Gly Leu  
 50 55 60  
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			100					105					110					
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Tyr	Gln	Glu	Lys	Asp	Ala	Leu	Gln	Glu	Val	Lys	Thr	Leu	Asp	Gly	Met			
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&lt;210&gt; 5889

&lt;211&gt; 2198

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5889

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1080

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&lt;210&gt; 5890

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5890

Ala	Ser	Arg	Pro	Ser	Arg	Ala	Val	Arg	Ala	Gly	Glu	Ala	Gly	Arg	Val
1				5				10						15	
Leu	Pro	Leu	Val	Ala	Gly	Arg	Asp	Ser	Leu	Ala	Leu	Phe	Pro	Arg	Leu
			20					25					30		
Glu	Cys	Ser	Gly	Thr	Ile	Thr	Ala	His	Cys	Ser	Leu	Asp	Phe	Pro	Gly
		35					40					45			
Ser	Ser	His	Ser	Pro	Thr	Ser	Ala	Ser	Gln	Ala	Val	Gly	Thr	Thr	Gly
	50					55					60				
Glu	Glu	Arg	Gln	Gln	His	Gly	Glu	Cys	Pro	Val	Pro	Thr	Pro	Trp	Lys

65		70		75		80									
Ala	Val	Pro	Pro	Gly	Ser	Pro	Gly	Val	Gly	Thr	Gln	Cys	Leu	Gly	Gly
				85					90					95	
Ala	Leu	Gly	Cys	Pro	Thr	Leu	Gly	Ala	Thr	Ala	Arg	Arg	Gly	Arg	Ser
			100					105					110		
Pro	Ala	Phe	His	His	Leu										
			115												

&lt;210&gt; 5891

&lt;211&gt; 1459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5891

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300
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1200

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 1320  
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 1440  
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 1459

<210> 5892

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5892

Met	Ala	Ala	Pro	Pro	Gln	Leu	Arg	Ala	Leu	Leu	Val	Val	Val	Asn	Ala	1	5	10	15
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Phe	Arg	Asn	Gly	Ala	Val	Tyr	Gly	Ala	Lys	Ile	Arg	Ala	Pro	His	Ala	35	40	45	
Leu	Val	Met	Thr	Phe	Leu	Phe	Arg	Asn	Gly	Ser	Leu	Gln	Glu	Lys	Leu	50	55	60	
Trp	Ala	Ile	Leu	Gln	Ala	Thr	Tyr	Ile	His	Ser	Trp	Asn	Leu	Ala	Arg	65	70	75	80
Phe	Val	Phe	Thr	Tyr	Lys	Gly	Leu	Arg	Ala	Leu	Gln	Ser	Tyr	Ile	Gln	85	90	95	
Gly	Lys	Thr	Tyr	Pro	Ala	His	Ala	Phe	Leu	Ala	Ala	Phe	Leu	Gly	Gly	100	105	110	
Ile	Leu	Val	Phe	Gly	Glu	Asn	Asn	Asn	Ile	Asn	Ser	Gln	Ile	Asn	Met	115	120	125	
Tyr	Leu	Leu	Ser	Arg	Val	Leu	Phe	Ala	Leu	Ser	Arg	Leu	Ala	Val	Glu	130	135	140	
Lys	Gly	Tyr	Ile	Pro	Glu	Pro	Arg	Trp	Asp	Pro	Phe	Pro	Leu	Leu	Thr	145	150	155	160
Ala	Val	Val	Trp	Gly	Leu	Val	Leu	Trp	Leu	Phe	Glu	Tyr	His	Arg	Ser	165	170	175	
Thr	Leu	Gln	Pro	Ser	Leu	Gln	Ser	Ser	Met	Thr	Tyr	Leu	Tyr	Glu	Asp	180	185	190	
Ser	Asn	Val	Trp	His	Asp	Ile	Ser	Asp	Phe	Leu	Val	Tyr	Asn	Lys	Ser	195	200	205	
Arg	Pro	Ser	Asn													210			

<210> 5893

<211> 1389

<212> DNA

<213> Homo sapiens

<400> 5893

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 300  
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 480  
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 960  
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 1389

&lt;210&gt; 5894

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5894

Met Val Trp Pro Ala Leu Trp Glu Leu Tyr Arg Glu Leu Gly Leu Phe

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Gln Gly Pro Ala Leu Gly Leu Arg Asn His Leu Gly Arg Lys Leu Arg			
20	25	30	
Arg Arg Lys Lys Lys Lys Ala Lys Arg Thr Thr Asn Trp Lys Ile Ile			
35	40	45	
Thr Asp Arg Pro Gly Phe His Asp Glu Ser Ala Ile Tyr Pro Val Gly			
50	55	60	
Tyr Cys Ser Thr Arg Ile Tyr Ala Ser Met Lys Cys Pro Asp Gln Lys			
65	70	75	80
Cys Leu Tyr Thr Cys Gln Ile Lys Asp Gly Gly Val Gln Pro Gln Phe			
85	90	95	
Glu Ile Val Pro Glu Asp Asp Pro Gln Asn Ala Ile Val Ser Ser Ser			
100	105	110	
Ala Asp Ala Cys His Ala Glu Leu Arg Thr Ile Ser Thr Thr Met			
115	120	125	
Gly Lys Leu Met Pro Asn Leu Leu Pro Ala Gly Ala Asp Phe Phe Gly			
130	135	140	
Phe Ser His Pro Ala Ile His Asn Leu Ile Gln Ser Cys Pro Gly Ala			
145	150	155	160
Arg Lys Cys Ile Asn Tyr Gln Trp Val Lys Phe Asp Val Cys Lys Pro			
165	170	175	
Gly Asp Gly Gln Leu Pro Glu Gly Leu Pro Glu Asn Asp Ala Ala Met			
180	185	190	
Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp			
195	200	205	
Pro Leu Leu Pro Gly Ser Leu Asp Leu Pro Glu Leu Gln Pro Ala Ala			
210	215	220	
Phe Val Ser Ser Tyr Gln Pro Met Tyr Leu Thr His Glu Pro Leu Val			
225	230	235	240
Asp Thr His Leu Gln His Leu Lys Ser Pro Ser Gln Gly Ser Pro Ile			
245	250	255	
Gln Ser Ser Asp			
260			

&lt;210&gt; 5895

&lt;211&gt; 2748

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5895

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 420

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 2748

&lt;210&gt; 5896

&lt;211&gt; 261

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5896

Ala	Thr	Ile	Arg	Lys	Met	Leu	Ser	Phe	Trp	Trp	Pro	Leu	Xaa	Leu	Ile
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Leu	Ala	Thr	Gln	Arg	Ile	Ser	Arg	Pro	Ile	Val	Asn	Leu	Phe	Val	Ser
			20					25					30		
Arg	Asp	Leu	Gly	Gly	Ser	Ser	Ala	Ala	Thr	Glu	Ala	Val	Ala	Ile	Leu
		35					40					45			
Thr	Ala	Thr	Tyr	Pro	Val	Gly	His	Met	Pro	Tyr	Gly	Trp	Leu	Thr	Glu
	50					55					60				
Ile	Arg	Ala	Val	Tyr	Pro	Ala	Phe	Asp	Lys	Asn	Asn	Pro	Ser	Asn	Lys
65					70				75					80	
Leu	Val	Ser	Thr	Ser	Asn	Thr	Val	Thr	Ala	Ala	His	Ile	Lys	Lys	Phe
				85					90					95	
Thr	Phe	Val	Cys	Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe
		100						105					110		
Trp	Thr	Pro	Asn	Val	Ser	Glu	Lys	Ile	Leu	Ile	Asp	Ile	Ile	Gly	Val
	115					120					125				
Asp	Phe	Ala	Phe	Ala	Glu	Leu	Cys	Val	Val	Pro	Leu	Arg	Ile	Phe	Ser
	130				135					140					
Phe	Phe	Pro	Val	Pro	Val	Thr	Val	Arg	Ala	His	Leu	Thr	Gly	Trp	Leu
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Met	Thr	Leu	Lys	Lys	Thr	Phe	Val	Leu	Ala	Pro	Ser	Ser	Val	Leu	Arg
			165					170					175		
Ile	Ile	Val	Leu	Ile	Ala	Ser	Leu	Val	Val	Leu	Pro	Tyr	Leu	Gly	Val

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<210> 5897
<211> 1930
<212> DNA
<213> Homo sapiens
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180  
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240  
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300  
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360  
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420  
aaatactgga atgacttcta caaaatccac gaaaatgggt ttttcaagga tagacattgg  
480  
ctttttaccg aattccctga gctggcacct agccaaaatc aaaatcattt gaaggactgg  
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720  
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&lt;210&gt; 5898

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5898

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&lt;210&gt; 5900

&lt;211&gt; 345

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5900

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Ile	Pro	Thr	Ile	Ile	Arg	Asp	Glu	Glu	Leu	Lys	Thr	Arg	Gly	Phe	Gly
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Gly	Ile	Tyr	Gly	Val	Gly	Lys	Ala	Ala	Leu	His	Pro	Pro	Ala	Leu	Ala
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Thr	Thr	Met	Pro	Gly	Met	Lys	Arg	Asp	Cys	Gly	Gly	Ala	Ala	Ala	Val
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			180					185					190		
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225	230	235
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260	265	270
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&lt;210&gt; 5901

&lt;211&gt; 984

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5901

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<211> 328

<212> PRT

<213> Homo sapiens

<400> 5902

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Glu	Cys	Leu	Gln	Arg	Phe	Ala	Asp	Ser	Leu	Gln	Glu	Val	Val	Asn	Tyr
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Gln	Ser	Phe	Val	Lys	Glu	Asp	Val	Arg	Lys	Phe	Lys	Glu	Thr	Lys	Lys
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Gln	Phe	Asp	Lys	Val	Arg	Glu	Asp	Leu	Glu	Leu	Ser	Leu	Val	Arg	Asn
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Ala	Glu	Leu	Asp	Gln	Leu	Val	Ile	Asp	Ser	Ala	Val	Glu	Lys	Arg	Glu
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Met	Glu	Arg	Lys	His	Ala	Ala	Ile	Gln	Gln	Arg	Thr	Leu	Arg	Asp	Phe
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Gln	Lys	Lys	Leu	Lys	Asp	Ala	Leu	Thr	Val	Val	Val	Asp	Asp	Leu	Arg
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 <211> 3734  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5904

&lt;211&gt; 308

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5904

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Pro	Asp	Asp	Tyr	Phe	Leu	Leu	Arg	Trp	Leu	Arg	Ala	Arg	Ser	Phe	Asp
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Gln	Lys	Asp	Ile	Asp	Asn	Ile	Ile	Ser	Trp	Gln	Pro	Pro	Glu	Val	Ile
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&lt;210&gt; 5906

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5906

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 Val Ser Lys Phe Arg Val Ile Phe Ala Gly Ala Gln Lys Asn Val Gly  
 35 40 45  
 Ser Ala Gly Val Thr Val Val Ile Val Arg Asp Asp Leu Leu Gly Phe  
 50 55 60  
 Ala Leu Arg Glu Cys Pro Ser Val Leu Glu Tyr Lys Val Gln Ala Gly  
 65 70 75 80  
 Asn Ser Ser Leu Tyr Asn Thr Pro Pro Cys Phe Ser Ile Tyr Val Met  
 85 90 95  
 Gly Leu Val Leu Glu Trp Ile Lys Asn Asn Gly Gly Ala Ala Ala Met  
 100 105 110  
 Glu Lys Leu Ser Ser Ile Lys Ser Leu Thr Ile Tyr Glu Ile Ile Asp  
 115 120 125  
 Asn Ser Gln Gly Phe Tyr Val Cys Pro Val Glu Pro Gln Asn Arg Ser  
 130 135 140  
 Lys Met Asn Ile Pro Phe Arg Ile Gly Asn Ala Lys Gly Asp Asp Ala  
 145 150 155 160  
 Leu Glu Lys Arg Phe Leu Asp Lys Ala Leu Glu Leu Asn Met Leu Ser  
 165 170 175  
 Leu Lys Gly His Arg Ser Val Gly Gly Ile Arg Ala Ser Leu Tyr Asn  
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&lt;210&gt; 5907

&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5907

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&lt;210&gt; 5908

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5908

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Gln Ile Ala Ala Ser Ala Glu Leu Glu Ser Gly Ala Met Pro Trp Ser
      35           40           45
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Leu Phe Lys Val Leu Ser Val Gly Arg Gly Gly Ser Pro Arg Leu Gln
65           70           75           80
Pro Asp Ser Arg Ala Leu His Tyr Met Lys Lys Leu Tyr Lys Thr Tyr
          85           90           95
Ala Thr Lys Glu Gly Ile Pro Lys Ser Asn Arg Ser His Leu Tyr Asn
      100           105           110
Thr Val Arg Leu Phe Thr Pro Cys Thr Arg His Lys Gln Ala Pro Gly
      115           120           125
Asp Gln Val Thr Gly Ile Leu Pro Ser Val Glu Leu Leu Phe Asn Leu
      130           135           140
Asp Arg Ile Thr Thr Val Glu His Leu Leu Lys Ser Val Leu Leu Tyr
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Asn Ile Asn Asn Ser Val Ser Phe Ser Ser Ala Val Lys Cys Val Cys
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Asn Leu Met Ile Lys Glu Pro Lys Ser Ser Ser Arg Thr Leu Gly Arg
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Ala Pro Tyr Ser Phe Thr Phe Asn Ser Gln Phe Glu Phe Gly Lys Lys
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Gln Gly Pro Asp Gln Glu Arg Ser Leu Ser Ala Tyr Pro Val Gly Glu
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305           310           315           320
Gln Glu Thr Val Ser Ser Glu Leu Lys Lys Pro Leu Gly Pro Ala Ser
          325           330           335
Phe Asn Leu Ser Glu Tyr Phe Arg Gln Phe Leu Leu Pro Gln Asn Glu
      340           345           350
Cys Glu Leu His Asp Phe Arg Leu Ser Phe Ser Gln Leu Lys Trp Asp
      355           360           365
Asn Trp Ile Val Ala Pro His Arg Tyr Asn Pro Arg Tyr Cys Lys Gly
      370           375           380
Asp Cys Pro Arg Ala Val Gly His Arg Tyr Gly Ser Pro Val His Thr
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&lt;210&gt; 5909

&lt;211&gt; 4343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5909

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&lt;210&gt; 5910

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 <212> PRT  
 <213> Homo sapiens

<400> 5910

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Gly Ser Phe Gly Ala Val Tyr Phe Ala Thr Asn Ala His Thr Ser Glu
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Val Val Ala Ile Lys Lys Met Ser Tyr Ser Gly Lys Gln Thr His Glu
 50           55           60
Lys Trp Gln Asp Ile Leu Lys Glu Val Lys Phe Leu Arg Gln Leu Lys
 65           70           75           80
His Pro Asn Thr Ile Glu Tyr Lys Gly Cys Tyr Leu Lys Glu His Thr
 85           90           95
Ala Trp Leu Val Met Glu Tyr Cys Leu Gly Ser Ala Ser Asp Leu Leu
 100          105          110
Glu Val His Lys Lys Pro Leu Gln Glu Val Glu Ile Ala Ala Ile Thr
 115          120          125
His Gly Ala Leu His Gly Leu Ala Tyr Leu His Ser His Ala Leu Ile
 130          135          140
His Arg Asp Ile Lys Ala Gly Asn Ile Leu Leu Thr Glu Pro Gly Gln
 145          150          155          160
Val Lys Leu Ala Asp Phe Gly Ser Ala Ser Met Ala Ser Pro Ala Asn
 165          170          175
Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ile Leu Ala
 180          185          190
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 195          200          205
Ile Thr Cys Ile Glu Leu Ala Glu Arg Lys Pro Pro Leu Phe Asn Met
 210          215          220
Asn Ala Met Ser Ala Leu Tyr His Ile Ala Gln Asn Asp Ser Pro Thr
 225          230          235          240
Leu Gln Ser Asn Glu Trp Thr Asp Ser Phe Arg Arg Phe Val Asp Tyr
 245          250          255
Cys Leu Gln Lys Ile Pro Gln Glu Arg Pro Thr Ser Ala Glu Leu Leu
 260          265          270
Arg His Asp Phe Val Arg Arg Asp Arg Pro Leu Arg Val Leu Ile Asp
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Leu Ile Gln Arg Thr Lys Asp Ala Val Arg Glu Leu Asp Asn Leu Gln
 290          295          300
Tyr Arg Lys Met Lys Lys Ile Leu Phe Gln Glu Thr Arg Asn Gly Pro
 305          310          315          320
Leu Asn Glu Ser Gln Glu Asp Glu Glu Asp Ser Glu His Gly Thr Ser
 325          330          335
Leu Asn Arg Glu Met Asp Ser Leu Gly Ser Asn His Ser Ile Pro Ser
 340          345          350
Met Ser Val Ser Thr Gly Ser Gln Ser Ser Ser Val Asn Ser Met Gln
 355          360          365
Glu Val Met Asp Glu Ser Ser Ser Glu Leu Val Met Met His Asp Asp
 370          375          380
Glu Ser Thr Ile Asn Ser Ser Ser Ser Val Val His Lys Lys Asp His

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Val	Phe	Ile	Arg	Asp	Glu	Ala	Gly	His	Gly	Asp	Pro	Arg	Pro	Glu
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Arg	Pro	Thr	Gln	Ser	Val	Gln	Ser	Gln	Ala	Leu	His	Tyr	Arg	Asn
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Glu	Arg	Phe	Ala	Thr	Ile	Lys	Ser	Ala	Ser	Leu	Val	Thr	Arg	Gln
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His	Glu	His	Glu	Gln	Glu	Asn	Glu	Leu	Arg	Glu	Gln	Met	Ser	Gly
	450					455					460			Tyr
Lys	Arg	Met	Arg	Arg	Gln	His	Gln	Lys	Gln	Leu	Ile	Ala	Leu	Glu
465					470					475				480
Lys	Leu	Lys	Ala	Glu	Met	Asp	Glu	His	Arg	Leu	Lys	Leu	Gln	Lys
			485						490					495
Val	Glu	Thr	His	Ala	Asn	Asn	Ser	Ser	Ile	Glu	Leu	Glu	Lys	Leu
			500					505					510	Ala
Lys	Lys	Gln	Val	Ala	Ile	Ile	Glu	Lys	Glu	Ala	Lys	Val	Ala	Ala
		515					520					525		
Asp	Glu	Lys	Lys	Phe	Gln	Gln	Gln	Ile	Leu	Ala	Gln	Gln	Lys	Lys
	530				535						540			Asp
Leu	Thr	Thr	Phe	Leu	Glu	Ser	Gln	Lys	Lys	Gln	Tyr	Lys	Ile	Cys
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Glu	Lys	Ile	Lys	Glu	Glu	Met	Asn	Glu	Asp	His	Ser	Thr	Pro	Lys
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Glu	Lys	Gln	Glu	Arg	Ile	Phe	Lys	His	Lys	Glu	Asn	Leu	Gln	His
		580					585						590	Thr
Gln	Ala	Glu	Glu	Glu	Ala	His	Leu	Leu	Thr	Ser	Thr	Gly	Asp	Trp
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Thr	Thr	Lys	Asn	Cys	Arg	Phe	Lys	Arg	Lys	Ile	Met	Ile	Lys	Arg
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His	Glu	Val	Glu	Gln	Gln	Asn	Ile	Arg	Glu	Glu	Leu	Asn	Lys	Lys
625					630					635				640
Thr	Met	Lys	Glu	Met	Glu	His	Ala	Met	Leu	Ile	Arg	His	Asp	Glu
			645						650				655	Ser
Thr	Arg	Glu	Leu	Glu	Tyr	Arg	Gln	Leu	His	Thr	Leu	Gln	Lys	Leu
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Met	Asp	Leu	Ile	Arg	Leu	Gln	His	Gln	Thr	Glu	Leu	Glu	Asn	Gln
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Glu	Tyr	Asn	Lys	Arg	Arg	Glu	Arg	Glu	Leu	His	Arg	Lys	His	Val
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Glu	Leu	Arg	Gln	Gln	Pro	Lys	Asn	Leu	Lys	Ala	Met	Glu	Met	Gln
705					710					715				Ile
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Ala	Leu	Lys	Asn	His	Gln	Leu	Glu	Val	Thr	Pro	Lys	Asn	Glu	His
		740						745					750	Lys
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	755						760					765		Ile
Leu	Ala	Glu	Gln	Tyr	Glu	Gln	Ser	Ile	Asn	Glu	Met	Met	Ala	Ser
	770					775					780			Gln
Ala	Leu	Arg	Leu	Asp	Glu	Ala	Gln	Glu	Ala	Glu	Cys	Gln	Ala	Leu
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Ile	Lys	Met	Gln	Thr	Glu	Ala	Gln	His	Glu	Arg	Glu	Leu	Gln	Lys
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Asp Tyr Arg

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 <213> Homo sapiens

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 35 40 45  
 Ala Ser Ser Ser Ser Leu Leu Asn Arg Leu Gln Leu Asp Asp Asp Ile



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His Val Cys Thr Met	Glu Thr Tyr Ile Thr Tyr	Arg Ile Thr Thr Lys
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Ser Thr Arg Val Glu	Phe Asp Leu Pro Glu Tyr	Ser Val Arg Arg Arg
100	105	110
Tyr Gln Asp Phe Asp	Trp Leu Arg Ser Lys Leu Glu	Glu Glu Ser Gln Pro
115	120	125
Thr His Leu Ile Pro	Pro Leu Pro Glu Lys Phe	Val Val Lys Gly Val
130	135	140
Val Asp Arg Phe Ser	Glu Glu Phe Val Glu Thr	Arg Arg Lys Ala Leu
145	150	155
Asp Lys Phe Leu Lys	Arg Ile Thr Asp His	Pro Val Leu Ser Phe Asn
165	170	175
Glu His Phe Asn Ile	Phe Leu Thr Ala Lys	Asp Leu Asn Ala Tyr Lys
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 Gly Gln Gly Phe Asp Arg His Leu Phe Ala Leu Arg His Leu Ala Ala  
 50 55 60  
 Ala Xaa Gly Ile Ile Leu Pro Glu Leu Tyr Leu Asp Pro Ala Tyr Gly  
 65 70 75 80  
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 85 90 95  
 Val Asn Xaa Cys Arg Phe Ala Pro Val Val Ser Asp Ala Phe Gly Val  
 100 105 110  
 Gly Tyr Ala Val His Asp Asn Trp Ile Gly Cys Asn Val Ser Ser Tyr  
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 85 90 95  
 Ser Lys Glu Ala Ser Ser Glu Ser Ser Gly His Lys Arg Ser Ser Ser  
 100 105 110  
 Trp Gly Arg Thr Tyr Ser Phe Thr Ser Ala Met Ser Arg Gly Cys Val  
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 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

<400> 5918

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Asp	Leu	Asp	Ser	Ser	Leu	Ser	Ser	Thr	Leu	Ser	Asn	Thr	Ser	Lys	Glu
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Gln Lys Ala Cys Asp Ser Ser Ser Arg Tyr Glu Asp Tyr Ser Glu Leu
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Glu Val Thr Thr Val Trp Glu Lys Met Leu Ser Thr Pro Gly Arg Ser
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          755          760          765
His Asp Tyr His Arg Asp Leu Tyr Asn His Leu Glu Glu His Glu Ile
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Gly Pro Ser Leu Tyr Ala Ala Pro Trp Phe Leu Thr Met Phe Ala Ser
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Gln Phe Pro Leu Gly Phe Val Ala Arg Val Phe Asp Met Ile Phe Leu
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[illegible]

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&lt;211&gt; 1252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5922

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Lys	Ser	Val	Ile	Ile	Trp	Thr	Ser	Lys	Leu	Glu	Gly	Ile	Leu	Lys	Tyr
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Gln	Arg	Glu	Ala	Val	Gln	Val	Leu	Glu	Gln	Leu	Thr	Asn	Asn	Ala	Val		
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Ala	Glu	Ser	Arg	Phe	Asn	Asp	Ala	Ala	Tyr	Tyr	Trp	Met	Leu	Ser			
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Pro	Lys	Asp	Thr	Pro	Ser	Gly	Ile	Ser	Lys	Val	Lys	Ile	Leu	Phe	Thr		
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Leu	Ala	Lys	Gln	Ser	Lys	Ala	Leu	Gly	Ala	Tyr	Arg	Leu	Ala	Arg	His		
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	995						1000					1005					
Ser	Glu	Glu	Leu	Val	Pro	Leu	Cys	Tyr	Arg	Cys	Ser	Thr	Asn	Asn	Pro		
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Asp Glu Asp Pro Phe Thr Ala Lys Leu Ser Phe Glu Gln Gly Gly Ser		
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Tyr Phe Arg Ser Leu Leu Pro Asp Ala Ser Ile Thr Met Cys Pro Ser		
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Cys Phe Gln Val Gly Gly His Pro Gly Ser Ser His Val Leu Leu Leu		
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Ala Thr Phe Pro Leu Pro Lys Cys Pro Ser Gly Arg Arg Gly Pro Trp		
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Glu Gly Gly Ala His Pro Trp Leu Gln Val Gly Thr Glu Ala Cys Leu		
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Ser Ser Pro Leu Leu Ala Phe His Val His Leu Lys Trp Thr Ser Leu		
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Ala Pro Ala Leu Ser Thr Ser Ser Pro Asn Pro Gly Gly Pro Ala Ser		
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Val Met Cys Pro		1245
1250		

&lt;210&gt; 5923

&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5923

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720

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&lt;210&gt; 5924

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5924

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Lys Met	Lys Asp Ile Lys Thr Ile	Phe Ser Glu Phe Ile Thr Ile Glu			
	35	40	45		
Met Leu Phe His Gly Lys Ala Leu Glu Val Tyr Thr Ala Ala Tyr Gln					
	50	55	60		
Asn Ile Gln Asn Ile Asp Glu Asp Glu Asp Leu Glu Val Phe Arg Asn					
65	70	75	80		
Ser Leu Tyr Ala Pro Asp Tyr Ser Ser Arg Leu Asp Ile Val Arg Ala					
	85	90	95		
Asn Ser Lys Ser Pro Leu Gln Arg Ser Leu Ser Ala Lys Cys Val Ser					
	100	105	110		
Gly Thr Gly Gln Val Ser Thr Cys Arg Leu Arg Lys Asp Gln Gln Ala					
	115	120	125		
Glu Asp Asp Glu Asp Asp Glu Leu Asp Val Thr Glu Glu Glu Asn Phe					
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Leu Lys					
145					

&lt;210&gt; 5925

&lt;211&gt; 4538

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5925

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<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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			20					25					30		
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Ala	Pro	Pro	Pro	Ile	Ser	Pro	Val	Leu	Pro	Leu	Val	Pro	Pro	Pro	Ala
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Thr	Ala	Leu	Asn	Pro	Pro	Ala	Pro	Pro	Thr	Phe	His	Gln	Pro	Gln	Lys
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Phe	Ala	Gly	Val	Asn	Lys	Ala	Pro	Ser	Val	Ile	Thr	His	Thr	Ala	Ser
			85						90					95	
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Pro Gln Ser Pro Gln Asn Asn Cys Ser Gly Lys Ser Asp Pro Lys Asn					
305		310		315	320
Val Ala Ala Leu Lys Asn Arg Gln Met Lys His Ile Ser Ala Glu Gln					
	325		330		335
Lys Arg Arg Phe Asn Ile Lys Met Cys Phe Asp Met Leu Asn Ser Leu					
	340		345		350
Ile Ser Asn Asn Ser Lys Leu Thr Ser His Ala Ile Thr Leu Gln Lys					
	355		360		365
Thr Val Glu Tyr Ile Thr Lys Leu Gln Gln Glu Arg Gly Gln Met Gln					
370		375		380	
Glu Glu Ala Arg Arg Leu Arg Glu Glu Ile Glu Glu Leu Asn Ala Thr					
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Ile Ile Ser Cys Gln Gln Leu Leu Pro Ala Thr Gly Val Pro Val Thr					
	405		410		415
Arg Arg Gln Phe Asp His Met Lys Asp Met Phe Asp Glu Tyr Val Lys					
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Thr Arg Thr Leu Gln Asn Trp Lys Phe Trp Ile Phe Ser Ile Ile Ile					
	435		440		445
Lys Pro Leu Phe Glu Ser Phe Lys Gly Met Val Ser Thr Ser Ser Leu					
	450		455		460
Glu Glu Leu His Arg Thr Ala Leu Ser Trp Leu Asp Gln His Cys Ser					
465		470		475	480
Leu Pro Ile Leu Arg Pro Met Val Leu Ser Thr Leu Arg Gln Leu Ser					
	485		490		495
Thr Ser Thr Ser Ile Leu Thr Asp Pro Ala Gln Leu Pro Glu Gln Ala					
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Ser Lys Ala Val Thr Arg Ile Gly Lys Arg Leu Gly Glu Ser					
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&lt;210&gt; 5927

&lt;211&gt; 1786

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5927

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&lt;210&gt; 5928

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5928

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&lt;210&gt; 5929

&lt;211&gt; 606

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5929

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&lt;400&gt; 5932

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 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys  
 65 70 75 80  
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&lt;210&gt; 5933

&lt;211&gt; 1953

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5933

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&lt;210&gt; 5934

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5934

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 Pro Lys Gly Val Tyr Asp Pro Gly Arg Asp Gly Ser Glu Lys Lys Ile  
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 Arg Glu Cys Val Ile Cys Met Met Asp Phe Val Tyr Gly Asp Pro Ile  
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 Arg Phe Leu Pro Cys Met His Ile Tyr His Leu Asp Cys Ile Asp Asp  
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&lt;210&gt; 5938

&lt;211&gt; 406

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5938

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Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
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Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
          130          135          140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
145          150          155          160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
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Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
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Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
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Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
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405

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 <212> DNA  
 <213> Homo sapiens

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5121

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&lt;210&gt; 5941

&lt;211&gt; 2590

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5941

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&lt;210&gt; 5942

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5942

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 <213> Homo sapiens

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5125

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&lt;210&gt; 5950

&lt;211&gt; 397

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5950

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His	Ala	Met	Lys	Gly	Val	Ile	Arg	Val	Lys	Phe	Val	Asn	Asp	Leu	Gly
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Thr	Thr	Ser	Gly	Asp	Glu	Arg	Leu	Tyr	Pro	Ser	Pro	Thr	Ser	Tyr	Ile
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His	Glu	Asn	Tyr	Leu	Gln	Leu	Phe	Glu	Phe	Val	Gly	Lys	Met	Leu	Gly
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Pro	Gly	Gly	Lys	Thr	Ile	Pro	Val	Thr	Asn	Glu	Asn	Lys	Ile	Ser	Tyr
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Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr		255
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Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile		270
	275	280
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe		285
	290	295
Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys		300
305	310	315
Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr		320
	325	330
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys		335
	340	345
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu		350
	355	360
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu		365
	370	375
Arg Tyr Ala Ile Ser Met Asn Thr Gly Phe Glu Leu Ser		380
385	390	395

&lt;210&gt; 5951

&lt;211&gt; 1724

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5951

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&lt;210&gt; 5952

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5952

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			20				25					30			
Ala	Pro	Arg	Phe	Pro	Pro	Gly	Gly	Phe	Ala	Ala	Gly	Arg	Thr	Met	Leu
			35			40					45				
Leu	Lys	Glu	Tyr	Arg	Ile	Cys	Met	Pro	Leu	Thr	Val	Asp	Glu	Tyr	Lys
	50				55				60						
Ile	Gly	Gln	Leu	Tyr	Met	Ile	Ser	Lys	His	Ser	His	Glu	Gln	Ser	Asp
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Arg	Gly	Glu	Gly	Val	Glu	Val	Val	Gln	Asn	Glu	Pro	Phe	Glu	Asp	Pro
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<210> 5953
<211> 777
<212> DNA
<213> Homo sapiens
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<210> 5954  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Arg Gln Leu Xaa Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu  
 50 55 60  
 Val Gln Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu  
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 Asn Cys Pro Glu Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala  
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 Val Leu Glu Glu Ile Gln Gln Glu Leu Ile Asn Gln Glu Gln Ser Ile  
 100 105 110  
 Ile Ser Glu Tyr Glu Lys Ser Leu Gln Phe Asp Glu Lys Cys Leu Ser  
 115 120 125  
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 130 135 140  
 Thr Lys Pro Val Ile Leu Gly Leu  
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<210> 5955  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5956

&lt;211&gt; 431

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5956

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		35					40					45				
Ser	Ala	Cys	Thr	Trp	Ala	Asp	Asp	Leu	Ser	Val	Cys	Tyr	Pro	Ser	Pro	
	50					55					60					
His	Ile	Thr	Ile	His	Met	His	Gly	Gly	Thr	Ser	Ser	Asp	Gly	Ser	Ser	
65					70					75					80	
Ser	Met	Ala	Ala	Ile	Tyr	Gly	Gly	Val	Glu	Gly	Gly	Gly	Thr	Arg	Ser	
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Glu	Val	Leu	Leu	Val	Ser	Glu	Asp	Gly	Lys	Ile	Leu	Ala	Glu	Ala	Asp	
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Gly	Leu	Ser	Thr	Asn	His	Trp	Leu	Ile	Gly	Thr	Asp	Lys	Cys	Val	Glu	
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Ser	Ile	Asp	Asn	Leu	Glu	Ala	Ala	Pro	His	Asp	Ile	Gly	Tyr	Val	Lys	
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Gln	Ala	Met	Phe	His	Tyr	Phe	Gln	Val	Pro	Asp	Arg	Leu	Gly	Ile	Leu	
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Thr	His	Leu	Tyr	Arg	Asp	Phe	Asp	Lys	Cys	Arg	Phe	Ala	Gly	Phe	Cys	
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Ile	Phe	Arg	Lys	Ala	Gly	Glu	Met	Leu	Gly	Arg	His	Ile	Val	Ala	Val	
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Leu	Pro	Glu	Ile	Asp	Pro	Val	Leu	Phe	Gln	Gly	Lys	Ile	Gly	Leu	Pro	
			340				345					350				
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<210> 5957  
<211> 855

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5957

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&lt;210&gt; 5958

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5958

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 35 40 45  
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 50 55 60  
 Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys Pro Glu  
 65 70 75 80  
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105

<210> 5959  
 <211> 830  
 <212> DNA  
 <213> Homo sapiens

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<210> 5960  
 <211> 251  
 <212> PRT  
 <213> Homo sapiens

<400> 5960  
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 20 25 30  
 Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn  
 35 40 45  
 Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr  
 50 55 60  
 Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser  
 65 70 75 80  
 Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

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<210> 5962
<211> 114
<212> PRT
<213> Homo sapiens
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&lt;400&gt; 5962

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Met Cys Gly Asp Met Gln Glu Gly Thr Pro Arg Cys Ala Tyr Thr Ala
 1           5           10           15
Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
          20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
          35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
          50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
65           70           75           80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
          85           90           95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
          100           105           110
Pro Ser

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&lt;210&gt; 5963

&lt;211&gt; 1288

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5963

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120
gaagaaaaag tgaaacgata tgtgaaagat gctgccaaga agggccagaa ggatgtctgc
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240
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300
gctgggtccc tgcagaagag cacagaagtg atgaaggcca tgcaaagtct tgtgaagatt
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420
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900

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 1200  
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 1288

<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

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			20					25					30		
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val	
		35				40					45				
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50					55					60				
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65				70						75				80	
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
				85					90					95	
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100					105					110		
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
	115					120						125			
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130					135					140				
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145				150					155					160	
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165						170					175	
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
		180						185					190		
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
	195					200						205			
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
	210					215						220			

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

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 120  
 agatgcctgg agagaatgag aaacagccgg gacaggctcc taaacaggta ccgccaggct  
 180  
 ggaagcagtg ggccagggaa ttctcagaac agctttctag ttcaagaggt gatggaagaa  
 240  
 gagtggaaatg ctttgcagnn tcagtgggag aattgtccag aagacttggc tcagttggag  
 300  
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 360  
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 480  
 atcacaagcg gtgtgggtgt gtgtcagtgt ggcctgtcca tcccatctca ttcttctgag  
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 600  
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 660  
 atgagctgtc tggcctgtga tacttgggct gtgatcctct agagccagct tggactcaca  
 720  
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 780  
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 840  
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 900  
 aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa  
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<210> 5966

<211> 233

<212> PRT

<213> Homo sapiens

<400> 5966  
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 20 25 30  
 Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn  
 35 40 45  
 Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly  
 50 55 60  
 Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu  
 65 70 75 80  
 Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

				85						90					95				
Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu	Ile	Gln				
			100					105					110						
Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile	Ile	Ser	Glu	Tyr	Glu	Lys				
		115					120					125							
Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser	Ile	Met	Leu	Ala	Glu	Trp				
	130					135					140								
Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys	Thr	Lys	Tyr	Asn	Leu	Arg				
145					150					155					160				
Ile	Thr	Ser	Gly	Val	Val	Val	Cys	Gln	Cys	Gly	Leu	Ser	Ile	Pro	Ser				
			165						170					175					
His	Ser	Ser	Glu	Leu	Thr	Glu	Gln	Lys	Leu	Arg	Ala	Cys	Leu	Glu	Gly				
			180					185					190						
Ser	Ile	Asn	Glu	His	Ser	Ala	His	Cys	Pro	His	Thr	Pro	Glu	Phe	Ser				
	195					200					205								
Val	Thr	Gly	Gly	Thr	Glu	Glu	Lys	Ser	Ser	Leu	Leu	Met	Ser	Cys	Leu				
	210					215					220								
Ala	Cys	Asp	Thr	Trp	Ala	Val	Ile	Leu											
225					230														

&lt;210&gt; 5967

&lt;211&gt; 1806

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5967

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 180  
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 240  
 ctgaaagtga gcatgttttt gaacacatta acaccgaagt tctacgtggc cctaacaggc  
 300  
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 360  
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 420  
 gacaacaact cttccaacaa ttctaattcc agtaacgggg actcagattc caataggcaa  
 480  
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 540  
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 600  
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 660  
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 720  
 gccttgagaa taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc  
 780  
 aatgtgtgcc agaagactcg ggaggaccag ggaagcaaag cccttctgga actacaagca  
 840



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 1020  
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 1080  
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 1800  
 ctttcc  
 1806

&lt;210&gt; 5968

&lt;211&gt; 434

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5968

Met	Asp	Phe	Asn	Gly	Val	Gln	Phe	Val	Cys	Arg	Asn	Leu	Leu	Lys	Val
1			5						10					15	
Ser	Met	Phe	Leu	Asn	Thr	Leu	Thr	Pro	Lys	Phe	Tyr	Val	Ala	Leu	Thr
			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
		35				40					45				
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
	50				55					60					
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65				70				75						80	
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
			85					90					95		
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

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<210> 5969
<211> 429
<212> DNA
<213> Homo sapiens
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120
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 240  
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 300  
 ccctgccccca gcgtgaagca cggggatgag tggggggaac cctcacgctg cgatggcggc  
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 420  
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 429

<210> 5970  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 5970  
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 Gly Val Leu Ala Ser Gln Ala Met Ile Glu Lys Ile Leu Ser Glu Asp  
 35 40 45  
 Pro Arg Trp Gln Asp Ala Asn Phe Val Leu Gly Ser Tyr Lys Thr Glu  
 50 55 60  
 Gln Cys Pro Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro  
 65 70 75 80  
 His Tyr His Asn Ser Arg Asp Arg Arg Arg Asn Pro Arg Arg Phe Gln  
 85 90 95  
 Tyr Arg Ser Thr Pro Cys Pro Ser Val Lys His Gly Asp Glu Trp Gly  
 100 105 110  
 Glu Pro Ser Arg Cys Asp Gly Gly Asp Gly Cys Gln Tyr Cys His Ser  
 115 120 125  
 Arg Thr Glu Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys  
 130 135 140

<210> 5971  
 <211> 565  
 <212> DNA  
 <213> Homo sapiens

<400> 5971  
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 120  
 catgtccctt aggtcagcta agccacatc agtgtccaaa taggcaacat ccctatttta  
 180  
 tagatgggtca tccccatttt agagatagct cccttttata tccccatttt acaggtgaag  
 240  
 gaattgagggc acagaagggt aggtcacttc tgcaagatga ccagctgaac caaaatttca  
 300

gggcttcaaa caccaaagt gttcctttgt cttccgtttc ccacttgctt cccagaggct  
 360  
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 420  
 cccaggactg tggccgtgga tgccagagcg aggatgtgaa tcctgttggg ttctgaagcc  
 480  
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 565

<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

Met	His	Arg	Ala	Leu	Ser	Cys	Pro	Leu	Gly	Gln	Leu	Ser	Pro	His	Gln
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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
			20					25					30		
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
		35				40						45			
Ala	Gln	Lys	Val	Arg	Ser	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn	
	50					55				60					
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65				70					75					80	
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
			85						90					95	
Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
			100												

<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 120  
 aacgagcctt cgaatcatgg acgcgcgggc ccagctcctc ctccgagttc ctcacccggg  
 180  
 gccgtcactc acatccgggg ccctcactca catccggggac cctcatccgg ggctctcacc  
 240  
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 420  
 ccctccctc cggtgagtac ccggaagccg ttttgggggc gcagcggggg ggcagcttgt  
 480

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 600  
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 660  
 gtctgtatgt cctcactggc ccttttggga ctttgccttg gcctcgttgc tctcaggatt  
 720  
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 780  
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 797

<210> 5974  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 5974  
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 His Pro Gly Pro Ser Leu Thr Ser Gly Ala Leu Thr His Ile Arg Asp  
 35 40 45  
 Pro His Pro Gly Leu Ser Pro Thr Ser Gly Thr Leu Met Pro Gly Arg  
 50 55 60  
 Arg Arg Gly Gly Pro Ser Phe Gly Thr Pro Ala Leu Arg Arg Arg Lys  
 65 70 75 80  
 Cys His Arg Glu Ala Pro Ala Ser Gly Leu Ser Thr Ala Ala Arg Glu  
 85 90 95  
 Arg Leu Trp Trp Pro Arg Ala Arg Val Cys Arg  
 100 105

<210> 5975  
 <211> 2175  
 <212> DNA  
 <213> Homo sapiens

<400> 5975  
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 120  
 cagagggcca cgtacaagta tgagatgatt aacaagcaga atgagcagat gcatgcgctg  
 180  
 ctggccattg ccctcacgat gtaccccatg cgtatcgatg agagcattca cctccagctg  
 240  
 cgggagaaat atggggacaa gatgttgcgc atgtcttatc ccgctgatga ttatgagtct  
 300  
 gaggcggctt atgacccta cgcttatccc agcgactatg atatgcacac aggagatcca  
 360  
 aagcaggacc ttgcttatga acgtcagtat gaacagcaaa cctatcaggt gatccctgag  
 420

gtgatcaaaa acttcatcca gtatttccac aaaactgtct cagatttgat tgaccagaaa  
480  
gtgtatgagc tacaggccag tcgtgtctcc agtgatgtca ttgaccagaa ggtgtatgag  
540  
atccaggaca tctatgagaa cagctggacc aagctgactg aaagattctt caagaatata  
600  
ccttggcccg aggctgaagc cattgctcca caggttggca atgatgctgt cttcctgatt  
660  
ttatacaaag aattatacta caggcacata tatgccaaag tcagtggggg accttccttg  
720  
gagcagaggt ttgaatccta ttacaactac tgcaatctct tcaactacat tcttaatgcc  
780  
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 <212> PRT  
 <213> Homo sapiens

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<210> 5978

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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		20						25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
		35					40					45			
Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
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<210> 5979

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 5979

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 <211> 169  
 <212> PRT  
 <213> Homo sapiens

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 Ser Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr Gln Asn  
 35 40 45  
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 Tyr Met Gln Gly Leu Ser Ala Cys Glu Gln Ile Arg Ala Ala Leu Tyr  
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<210> 5981  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5982

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5982

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		20					25					30			
Pro	Arg	Ala	Pro	Leu	Pro	Arg	Ser	Ser	Ala	Arg	Arg	Pro	Ser	Lys	Ala
		35				40					45				
Asn	Leu	His	Thr	Leu	Gly	Gln	Leu	Lys	Leu	Ser	Arg	Arg	Cys	Arg	Glu
	50				55					60					
Pro	Arg	Leu	Gly	Arg	Ala	Gly	Gln	Gln	Arg	Leu	His	Pro	Arg	Thr	Arg
65				70					75				80		
Pro	Arg	Arg	Gly	Ser	Gly	Pro	Leu	Val	Arg	Ala	Gly	Arg	Arg	Gly	Trp
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Gly Lys

&lt;210&gt; 5983

&lt;211&gt; 790

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5983

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<210> 5984

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5984

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			20					25					30		
Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
		35					40					45			
Gln	Leu	Gly	Leu	Asp	Ala	Val	Glu	Pro	Thr	Ala	Leu	His	Lys	Thr	Leu
	50					55					60				
Glu	Thr	Pro	Ala	His	Asp	Arg	Ala	Glu	Pro	Asn	Ser	Gln	Leu	Asp	Ser
65					70					75				80	
Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
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Asp	Arg	Thr	Gly	Val	Asn	Phe	Ser	Val	Asn	Ser	Asn	Leu	Arg	Asp	Leu
			100						105					110	
Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
		115						120					125		
Ser	Lys	Cys	Leu	Met	Gln	Asp	Asp	Thr	Arg	Gly	Met	Phe	Met	Glu	Thr
	130					135					140				
Thr	Val	Phe	Cys	Thr	Ser	Glu	Asp	Gly	Leu	Val	Ser	Gly	Phe	Gly	Arg
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Thr	Val	Asn	Asp	Asn	Leu	Ile	Asp	Gly	Asn	Cys	Thr	Pro	Gln	Asn	Pro
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180

185

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 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

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 Ala Gln Ala Trp Lys Glu Val Arg Leu His Lys Thr Thr Trp Leu Arg  
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 Val Lys Ile Gln Asp Thr Asn Val Thr Ser Glu Asp Lys Lys Phe His

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1140

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<210> 5988  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<400> 5988  
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 35 40 45  
 Trp Ile Lys Ala Arg Ser Gly Asp Asn Pro Val Tyr Ile Trp Gly His  
 50 55 60  
 Ser Leu Gly Thr Gly Val Ala Thr Ile Trp Cys Gly Ala Ser Val Ser  
 65 70 75 80  
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<213> Homo sapiens

<400> 5994

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&lt;211&gt; 1528

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<211> 757

<212> PRT

<213> Homo sapiens

<400> 6000

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Glu	Gly	Thr	Gln	Ala	Asp	Thr	Arg	Glu	Ser	Asp	Lys	Met	Trp	Leu	Val



275	280	285
Arg His Leu Glu Ile Ile	Arg Lys Tyr Val Leu Asp	Asp Leu Ile Val
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Ala Lys Asn Leu Met Val	Gln Cys Phe Pro Pro	His Tyr Glu Ile Phe
305	310	315
Lys Asn Leu Leu Asn Met	Tyr His Gln Ala Leu Ser	Thr Arg Met Gln
325	330	335
Asp Leu Ala Ser Glu Asp	Leu Glu Ala Asn Glu Ile	Val Ser Leu Leu
340	345	350
Thr Trp Val Leu Asn Thr	Tyr Thr Ser Thr Glu Met	Met Arg Asn Val
355	360	365
Glu Leu Ala Pro Glu Val	Asp Val Gly Thr Leu Glu	Pro Leu Leu Ser
370	375	380
Pro His Val Val Ser Glu	Leu Leu Asp Thr Tyr Met	Ser Thr Leu Thr
385	390	395
Ser Asn Ile Ile Ala Trp	Leu Arg Lys Ala Leu Glu	Thr Asp Lys Lys
405	410	415
Asp Trp Val Lys Glu Thr	Glu Pro Glu Ala Asp Gln	Asp Gly Tyr Tyr
420	425	430
Gln Thr Thr Leu Pro Ala	Ile Val Phe Gln Met Phe	Glu Gln Asn Leu
435	440	445
Gln Val Ala Ala Gln Ile	Ser Glu Asp Leu Lys Thr	Lys Val Leu Val
450	455	460
Leu Cys Leu Gln Gln Met	Asn Ser Phe Leu Ser Arg	Tyr Lys Asp Glu
465	470	475
Ala Gln Leu Tyr Lys Glu	Glu His Leu Arg Asn Arg	Gln His Pro His
485	490	495
Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn Asn	Cys Gln Thr Phe
500	505	510
Lys Glu Ser Ile Val Ser	Leu Lys Arg Lys Tyr Leu	Lys Asn Glu Val
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Glu Glu Gly Val Ser Pro	Ser Gln Pro Ser Met Asp	Gly Ile Leu Asp
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Asp Leu Glu Gln His Leu	Asn Glu Leu Met Thr Lys	Lys Trp Leu Leu
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Glu Ala His Arg Arg Val	Val Val Glu Tyr Leu Arg	Ala Val Met Gln
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Lys Arg Ile Ser Phe Arg	Ser Pro Glu Glu Arg Lys	Glu Gly Ala Glu
625	630	635
Lys Met Val Arg Glu Ala	Glu Gln Arg Arg Phe Leu	Phe Arg Lys Leu
645	650	655
Ala Ser Gly Phe Gly Glu	Asp Val Asp Gly Tyr Cys	Asp Thr Ile Val
660	665	670
Ala Val Ala Glu Val Ile	Lys Leu Thr Asp Pro Ser	Leu Leu Tyr Leu
675	680	685
Glu Val Ser Thr Leu Val	Ser Lys Tyr Pro Asp Ile	Arg Asp Asp His
690	695	700
Ile Gly Ala Leu Leu Ala	Val Arg Gly Asp Ala Ser	Arg Asp Met Lys

705		710		715		720
Gln Thr Ile Met Glu Thr Leu Glu Gln Gly Pro Ala Gln Ala Ser Pro						
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Ala Lys Leu Leu Lys						
	755					

<210> 6001  
 <211> 2490  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 6002

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6002

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		35					40					45					
Trp	Leu	Asp	Ala	Gln	Ser	Gly	Leu	Ala	Ser	Ala	Pro	Val	Ser	Gly	Ala		
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Gly	Asn	His	Ser	Tyr	Cys	Arg	Asn	Pro	Asp	Glu	Asp	Pro	Ala	Gly	Pro		
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Trp	Cys	Tyr	Val	Ser	Gly	Glu	Ala	Gly	Val	Pro	Glu	Lys	Arg	Pro	Cys		
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Glu	Asp	Leu	Arg	Cys	Pro	Glu	Thr	Thr	Ser	Gln	Ala	Leu	Pro	Ala	Phe		
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Thr	Thr	Glu	Ile	Gln	Glu	Ala	Ser	Glu	Gly	Pro	Gly	Ala	Asp	Glu	Val		
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Gln	Val	Phe	Ala	Pro	Ala	Asn	Ala	Leu	Pro	Ala	Arg	Ser	Glu	Ala	Ala		
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Ala	Val	Gln	Pro	Val	Ile	Gly	Ile	Ser	Gln	Arg	Val	Arg	Met	Asn	Ser		
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&lt;210&gt; 6003

&lt;211&gt; 3107

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6003

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&lt;210&gt; 6004

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6004

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			20					25					30		
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Ala	Leu	Pro	Xaa	Arg	Gly	Ser	Pro	Arg	Gly	Pro	Gly	Pro	Arg	Ala	Pro
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			100					105					110				
Pro	Leu	Ser	Ser	Ala	Phe	Gln	Pro	Pro	Ala	Leu	Gly	Pro	Ala	Pro	Lys		
			115					120					125				
Glu	Gly	Gly	Pro	Ser	Ser	Leu	Asn	Lys	Arg	Cys	Thr						
			130				135				140						

&lt;210&gt; 6005

&lt;211&gt; 1735

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6005

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&lt;210&gt; 6006

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6006

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		20						25					30		
Gly	Glu	Ala	Gly	Glu	Met	Gly	Leu	Ser	Gly	Leu	Pro	Gly	Ala	Asp	Gly
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Leu	Lys	Gly	Glu	Lys	Gly	Glu	Ser	Ala	Ser	Gln	Pro	Thr	Gly	Glu	Pro
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Arg	Gly	Val	Pro	Gly	Arg	Lys	Gly	Val	Lys	Gly	Gln	Lys	Gly	Glu	Pro
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Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
		180						185						190	
Pro	Val	Pro	Gly	Cys	Trp	His	Lys								
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&lt;211&gt; 693

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 6007

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&lt;210&gt; 6008

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6008

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Thr	Ser	Asp	Gly	Ala	Ile	Ser	Val	Pro	Ser	Leu	Ser	Ala	Pro	Gly	Gln
			20					25					30		
Gly	Lys	Met	Val	Lys	Lys	Val	Cys	Pro	Cys	Asn	Gln	Leu	Cys	Arg	Thr
		35					40					45			
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		50				55					60				
Ala	Gln	Pro	Pro	Ala	Met	Thr	Ser	Ser	Arg	Lys	Gly	Thr	Phe	Thr	Asp
65					70				75						80
Asp	Leu	His	Lys	Leu	Val	Asp	Asn	Trp	Ala	Arg	Asp	Ala	Met	Asn	Leu
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Ser	Gly	Arg	Arg	Gly	Ser	Lys	Gly	His	Met	Asn	Tyr	Glu	Gly	Pro	Gly
			100				105						110		
Met	Ala	Arg	Lys	Phe	Ser	Ala	Pro	Gly	Gln	Leu	Cys	Ile	Ser	Met	Thr
			115				120					125			
Ser	Asn	Leu	Gly	Gly	Ser	Ala	Pro	Ile	Ser	Ala	Ala	Ser	Ala	Thr	Ser
		130				135					140				
Leu	Gly	His	Phe	Thr	Lys	Ser	Met	Cys	Pro	Pro	Gln	Gln	Tyr	Gly	Phe
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Pro	Ala	Thr	Pro	Phe	Gly	Ala	Gln	Trp	Ser	Gly	Thr	Gly	Gly	Pro	Ala

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Ser	Asn	Leu	Arg	Thr	Thr														
		210																	

&lt;210&gt; 6009

&lt;211&gt; 1570

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6009

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 <212> PRT  
 <213> Homo sapiens

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 50 55 60  
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 65 70 75 80  
 Glu Thr Tyr Ser Asn Arg Val Ser Ser Ile Ser Pro Gly Ser Ala Thr  
 85 90 95  
 Leu Leu Ser Ser Phe Gly Ala Trp Asp His Ile Cys Asn Met Arg Tyr  
 100 105 110  
 Arg Ala Phe Arg Arg Met Gln Val Trp Asp Ala Cys Ser Glu Ala Leu  
 115 120 125  
 Ile Met Phe Asp Lys Asp Asn Leu Asp Asp Met Gly Tyr Ile Val Glu  
 130 135 140  
 Asn Asp Val Ile Met His Ala Leu Thr Lys Gln Leu Glu Ala Val Ser  
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 Asp Arg Val Thr Val Leu Tyr Arg Ser Lys Ala Ile Arg Tyr Thr Trp  
 165 170 175  
 Pro Cys Pro Phe Pro Met Ala Asp Ser Ser Pro Trp Val His Ile Thr  
 180 185 190  
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 195 200 205  
 Gly His Asn Ser Gly Val Arg Gln Ala Val Gly Ile Gln Asn Val Ser  
 210 215 220  
 Trp Asn Tyr Asp Gln Ser Ala Val Val Ala Thr Leu His Leu Ser Glu  
 225 230 235 240  
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<212> DNA
<213> Homo sapiens
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&lt;210&gt; 6012

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6012

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			20					25					30		
Lys	Glu	Pro	Gly	Asp	Ser	Ala	Gln	Phe	Thr	Lys	Ala	Ile	Ala	Ile	Ile
			35				40					45			
Phe	Pro	Phe	Leu	Tyr	Leu	Leu	Glu	Lys	Val	Glu	Cys	Thr	Pro	Ser	Gln
			50			55					60				
Glu	His	Leu	Lys	His	Gln	Thr	Val	Tyr	Arg	Leu	Leu	Lys	Cys	Ala	Pro
65					70					75				80	
Arg	Gly	Lys	Asn	Gly	Phe	Thr	Pro	Leu	His	Met	Ala	Val	Asp	Lys	Asp
			85						90					95	
Thr	Thr	Asn	Val	Gly	Arg	Tyr	Pro	Val	Gly	Arg	Phe	Pro	Ser	Leu	His
			100					105					110		
Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
			115					120					125		
Phe	Asp	Asn	Asn	Thr	Pro	Leu	His	Ile	Ala	Ala	Gln	Asn	Asn	Cys	Pro
			130				135				140				
Ala	Ile	Met	Asn	Ala	Leu	Ile	Glu	Ala	Gly	Ala	His	Met	Asp	Ala	Thr
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&lt;210&gt; 6014

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6014

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			20					25					30		
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
		35				40					45				
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
		50				55					60				
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala
65					70					75				80	
Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
			85					90					95		
Gln	Ala	Gln	Ala	Gln	Ala	Ser	Gln	Ala	Ser	Gln	Gln	Gln	Gln	Gln	Gln

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      130      135      140
Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu
145      150      155      160
His His Lys Asp Ile Cys Leu Thr Val Thr Thr Ser Thr Ile Gln Val
      165      170      175
Glu His Leu Ala Ser Ser
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&lt;210&gt; 6015

&lt;211&gt; 612

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6015

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612

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&lt;210&gt; 6016

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6016

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Pro Arg Ser Pro Glu Arg Leu Pro Ala Ser Gln Gly Ile Ser Arg Gly
      20      25      30
Arg Cys Lys Leu Asn Asn Asn Ser Trp Ser Gly Leu Thr Cys Pro Thr
      35      40      45
Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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Gln Tyr Ile

<210> 6017  
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 <212> DNA  
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&lt;210&gt; 6018

&lt;211&gt; 537

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6018

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<211> 3002

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6019

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3002

&lt;210&gt; 6020

&lt;211&gt; 387

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6020

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Ile Glu Asp Ile Cys Ile Cys Cys Gly Ser Leu Gln Val His Thr Gln
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His Pro Leu Phe Glu Gly Gly Ile Cys Ala Pro Cys Lys Asp Lys Phe
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Leu Asp Ala Leu Phe Leu Tyr Asp Asp Asp Gly Tyr Gln Ser Tyr Cys
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Ser Ile Cys Cys Ser Gly Glu Thr Leu Leu Ile Cys Gly Asn Pro Asp
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Cys Thr Arg Cys Tyr Cys Phe Glu Cys Val Asp Ser Leu Val Gly Pro
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Arg Ser Gln Leu Lys Ala Phe Tyr Asp Arg Glu Ser Glu Asn Pro Leu
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225          230          235          240
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 <213> Homo sapiens

<400> 6022

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Gly	Glu	Ser	Gln	Pro	Asn	Pro	Lys	Thr	Val	Glu	Leu	Leu	Ser	Gly	Val
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Val	Asp	Gln	Thr	Lys	Asp	Gly	Leu	Ile	Ser	Phe	Gln	Glu	Phe	Val	Ala
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Arg Asp Lys Phe Met His Lys Asp Gly Ser Val Pro Leu Ala Ala Glu
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Thr Gly Pro Arg Val Ser Ala Leu Ser Val Val Arg Asp Leu Gly Phe
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&lt;210&gt; 6023

&lt;211&gt; 1014

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6023

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&lt;210&gt; 6024

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6024

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Pro	Gly	Leu	Pro	Ala	Phe	Ala	Glu	Val	Asp	Leu	Leu	Ser	Leu	Leu	Val
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&lt;210&gt; 6026

&lt;211&gt; 496

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6026

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          35          40          45
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          50          55          60
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&lt;211&gt; 99

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&lt;213&gt; Homo sapiens

&lt;400&gt; 6030

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&lt;213&gt; Homo sapiens

&lt;400&gt; 6034

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770				775				780							
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785				790				795				800			
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 <213> Homo sapiens

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 Ala Trp Pro Arg Ser Gln Ser His Asn Ala His His Cys Pro Thr Met  
 50 55 60  
 Pro Phe Arg Met Glu Pro Leu Ile His Trp Ala His Ser His Gly Gln  
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&lt;210&gt; 6038

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6038

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Ile	Thr	Ala	Leu	Cys	Thr	Ala	Leu	Ala	Glu	Pro	Ala	Trp	Leu	His	Ile	20	25	30	
His	Gly	Gly	Thr	Cys	Ser	Arg	Gln	Glu	Leu	Gly	Val	Ser	Asp	Val	Leu	35	40	45	
Gly	Tyr	Val	His	Pro	Asp	Leu	Leu	Lys	Asp	Phe	Cys	Met	Asn	Pro	Gln	50	55	60	
Thr	Val	Leu	Leu	Leu	Arg	Val	Ile	Ala	Ala	Phe	Cys	Phe	Leu	Gly	Ile	65	70	75	80
Leu	Cys	Ser	Leu	Ser	Ala	Phe	Leu	Leu	Asp	Val	Phe	Gly	Pro	Lys	His	85	90	95	
Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr	100	105	110	
Val	Leu	Gln	Cys	Ala	Thr	Val	Ile	Gly	Phe	Ser	Tyr	Trp	Ala	Ser	Glu	115	120	125	
Leu	Ile	Leu	Ala	Gln	Gln	Gln	Gln	His	Lys	Lys	Tyr	His	Gly	Ser	Gln	130	135	140	
Val	Tyr	Val	Thr	Phe	Ala	Val	Ser	Phe	Tyr	Leu	Val	Ala	Gly	Ala	Gly	145	150	155	160
Gly	Ala	Ser	Ile	Leu	Ala	Thr	Ala	Ala	Asn	Leu	Leu	Arg	His	Tyr	Pro	165	170	175	
Thr	Glu	Glu	Glu	Glu	Gln	Ala	Leu	Glu	Leu	Leu	Ser	Glu	Met	Glu	Glu	180	185	190	
Asn	Glu	Pro	Tyr	Pro	Ala	Glu	Tyr	Glu	Val	Ile	Asn	Gln	Phe	Gln	Pro	195	200	205	
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 Gln Asn Val Val Pro Glu Ala Glu Gly Glu Asp Asp Pro Ala Gly Glu  
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 Ala Gln Ala Gly Arg Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val  
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 Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala  
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 Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala  
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 Gly Gln Val Phe Ser Trp Gly Gly Arg His Gly Gln Leu Gly His  
 115 120 125  
 Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln  
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 Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys  
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 Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly  
 165 170 175  
 Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val  
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 Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg  
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 Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln  
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 Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys  
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 Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys  
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&lt;210&gt; 6041

&lt;211&gt; 291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6041

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 Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile  
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 <213> Homo sapiens

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Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
      35           40           45
Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
      50           55           60
Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
65           70           75           80
Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro'Gly Arg Met
      85           90           95
Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
      100          105          110
Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
      115          120          125
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Thr Leu Cys Leu Asp Ile Ser Tyr
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&lt;210&gt; 6045

&lt;211&gt; 1916

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6045

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&lt;210&gt; 6046

&lt;211&gt; 457

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6046

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<212> DNA
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&lt;210&gt; 6048

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6048

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 Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala  
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&lt;210&gt; 6053

&lt;211&gt; 3257

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6053

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<210> 6054

<211> 382

<212> PRT

<213> Homo sapiens

<400> 6054

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<211> 2089
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 6056

&lt;211&gt; 285

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6056

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&lt;210&gt; 6057

&lt;211&gt; 3924

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6057

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&lt;210&gt; 6058

&lt;211&gt; 500

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6058

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<400> 6060

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			245						250					255	
Tyr	Met	Tyr	Leu	Gln	Pro	Pro	Ser	Ser	Thr	Ser	Lys	Asp	Trp	Gly	Lys

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&lt;210&gt; 6061

&lt;211&gt; 1582

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6061

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<210> 6062

<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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	50					55				60					
Asp	Asp	Val	Val	Ile	Thr	Asn	Pro	His	Ile	Glu	Ala	Ile	Leu	Glu	Asn
65					70					75				80	
Glu	Asp	Trp	Ile	Glu	Asp	Ala	Ser	Gly	Leu	Met	Ser	His	Cys	Ile	Ala
			85						90				95		
Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	Glu	Lys	Leu	Val	Ala	Met	Thr
		100						105					110		
Met	Gly	Ser	Gly	Ala	Lys	Met	Lys	Thr	Ser	Ala	Ser	Val	Ser	Asp	Ile
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	130					135					140				
Ser	Met	Tyr	Pro	Pro	Leu	Asp	Pro	Lys	Leu	Leu	Asp	Ala	Arg	Thr	Thr
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Ala	Leu	Leu	Leu	Ser	Val	Ser	His	Leu	Val	Leu	Val	Thr	Arg	Asn	Ala
				165					170					175	
Cys	His	Leu	Thr	Gly	Gly	Leu	Asp	Trp	Ile	Asp	Gln	Ser	Leu	Ser	Ala
			180				185					190			
Ala	Glu	Glu	His	Leu	Glu	Val	Leu	Arg	Glu	Ala	Ala	Leu	Ala	Ser	Glu
	195					200					205				
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Ala	Ile														
225															

<210> 6063

<211> 2286

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6063

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780  
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 1860  
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 1920  
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 1980  
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&lt;210&gt; 6064

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6064

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			20					25					30		
Phe	Leu	His	Pro	Asp	Leu	Gly	Val	Gly	Gly	Ala	Glu	Arg	Leu	Val	Leu
		35				40						45			
Asp	Ala	Ala	Leu	Ala	Leu	Gln	Ala	Arg	Gly	Cys	Ser	Val	Lys	Ile	Trp
		50				55					60				
Thr	Ala	His	Tyr	Asp	Pro	Gly	His	Cys	Phe	Ala	Glu	Ser	Arg	Glu	Leu
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Pro	Val	Arg	Cys	Ala	Gly	Asp	Trp	Leu	Pro	Arg	Gly	Leu	Gly	Trp	Gly
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Gly	Arg	Gly	Ala	Ala	Val	Cys	Ala	Tyr	Val	Arg	Met	Val	Phe	Leu	Ala
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Leu	Tyr	Val	Leu	Phe	Leu	Ala	Asp	Glu	Glu	Phe	Asp	Val	Val	Val	Cys
		115				120					125				
Asp	Gln	Val	Ser	Ala	Cys	Ile	Pro	Val	Phe	Arg	Leu	Ala	Arg	Arg	Arg
		130				135					140				
Lys	Lys	Ile	Leu	Phe	Tyr	Cys	His	Phe	Pro	Asp	Leu	Leu	Leu	Thr	Lys



145		150		155		160									
Arg	Asp	Ser	Phe	Leu	Lys	Arg	Leu	Tyr	Arg	Ala	Pro	Ile	Asp	Trp	Ile
			165						170					175	
Glu	Glu	Tyr	Thr	Thr	Gly	Met	Ala	Asp	Cys	Ile	Leu	Val	Asn	Ser	Gln
			180					185					190		
Phe	Thr	Ala	Ala	Val	Phe	Lys	Glu	Thr	Phe	Lys	Ser	Leu	Ser	His	Ile
		195					200					205			
Asp	Pro	Asp	Val	Leu	Tyr	Pro	Ser	Leu	Asn	Val	Thr	Ser	Phe	Asp	Ser
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225					230										

&lt;210&gt; 6065

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6065

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&lt;210&gt; 6066

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6066

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Arg	Val	Leu	Arg	Gly	Val	Asp	Asp	Leu	Asp	Phe	Phe	Ile	Gly	Asp	Glu
		20					25					30			
Ala	Ile	Asp	Lys	Pro	Thr	Tyr	Ala	Thr	Lys	Trp	Pro	Ile	Arg	His	Gly
		35				40					45				
Ile	Ile	Glu	Asp	Trp	Asp	Leu	Met	Glu	Arg	Phe	Met	Glu	Gln	Val	Val
	50				55			60							
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&lt;210&gt; 6067

&lt;211&gt; 406

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6067

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406

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&lt;210&gt; 6068

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6068

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          35           40           45
Ser Arg Ser Ser Glu Pro Pro Ala Cys Pro Arg His Trp Pro Cys Pro
          50           55           60
Pro Gly Leu Pro Phe Gly Gln Gly Ala Val Ala Arg Ala Ala Pro Cys
65           70           75           80
Pro Ala Tyr Ser His Ser Ala Val Gly Arg Pro Pro Leu Pro Arg Lys
          85           90           95
Arg Gly Ala Val Ser Ser Gly Arg Leu His Arg Arg Gly Thr Gly Ala
          100          105          110
Met Trp Trp Glu Gly
          115

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&lt;210&gt; 6069

&lt;211&gt; 456

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6069

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120
ctggagtact gtatcatggt cattggggtc cccaacgtgg gcaagtcctc cctcatcaac
180

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<210> 6070

<211> 148

<212> PRT

<213> Homo sapiens

<400> 6070

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		20						25					30		
His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
		35					40					45			
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	50					55					60				
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65					70				75					80	
Ile	Thr	Arg	Ala	Val	Met	Ser	Lys	Ile	Gln	Val	Glu	Ser	Ser	Gly	Ala
			85					90						95	
Arg	Pro	Ser	Thr	Leu	Ser	Arg	Ala	Leu	Gln	Ala	Ser	Gly	Thr	Cys	Arg
		100					105					110			
Pro	Leu	Cys	Gly	Phe	Arg	Leu	Leu	Thr	Thr	Leu	Pro	Ser	Pro	Pro	Leu
	115					120					125				
Ser	Val	Pro	Ala	Glu	His	Pro	Arg	Gly	Arg	His	Cys	Pro	Ala	Leu	Ile
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Pro	Gln	Ser	Ser												

145

<210> 6071

<211> 2633

<212> DNA

<213> Homo sapiens

<400> 6071

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 180  
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360  
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600  
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&lt;210&gt; 6076

&lt;211&gt; 601

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6076

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 1800  
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 1860  
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 1920  
 aaaccagtga ctttatgggg ctgagctagt aggggaagccc ctggaaagat gctgcgttcc  
 1980  
 gaacctgtgc ctaatacacg caagggcgct gtcccgccca accccgcctt taaacgccac  
 2040  
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 2093

&lt;210&gt; 6078

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6078

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Leu	Arg	Ala	Val	Ser	Gly	Gly	Ser	Gly	Asn	Arg	Ile	Lys	Ala	Arg	Gly
		20						25					30		
Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
		35					40					45			
Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
	50					55					60				
Pro	Leu	Ala	Leu	Gln	Leu	Glu	Gln	Leu	Leu	Asn	Pro	Arg	Pro	Ser	Glu
65				70						75				80	
Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
			85						90					95	
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
		100						105					110		
Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
		115					120					125			
Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
	130					135					140				
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
145					150					155				160	
Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
			165						170					175	
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

180 185 190  
 Gly Glu Gln Glu Asp Glu Lys Pro Leu Cys Lys Asn Thr Gly Leu Gln  
 195 200 205  
 Cys Pro Glu Tyr Gln  
 210

<210> 6079  
 <211> 651  
 <212> DNA  
 <213> Homo sapiens

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 catgcgcagc ggggccgtgg gtgtacgcgg cgcagcgcgg cagtcctgat ggcccggcat  
 180  
 ggggttaccgc tgcctcccct gctgtcgcct ctggtcggcg cgtggctcaa gctaggaaat  
 240  
 ggacaggcta ctagcatggg ccaactgcag ggtgggagat tcctgatggg aacaaattct  
 300  
 ccagacagca gagatgggta agggcctgtg cgggaggcga cagtgaacc ctttgccatc  
 360  
 gacatatttc ctgtcaccaa caaagatttc agggattttg tcaggagaaa aaagtatcgg  
 420  
 acagaagctg agatgtttgg atggagcttt gtctttgagg actttgtctc tgatgagctg  
 480  
 agaaacaaaag ccaccagcc aatgaagtct gtactctggg ggcttccagt ggaaaaggca  
 540  
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<210> 6080  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<400> 6080  
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 20 25 30  
 Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser  
 35 40 45  
 Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala  
 50 55 60  
 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg  
 65 70 75 80  
 Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val  
 85 90 95  
 Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro

```

          100          105          110
Met Lys Ser Val Leu Trp Trp Leu Pro Val Glu Lys Ala Phe Trp Arg
          115          120          125
Gln Pro Ala Gly Pro Gly Ser Gly Ile Arg Glu Arg Leu Glu His Pro
          130          135          140
Val Leu His Val Ser Trp Asn Asp Ala Arg Ala Tyr Cys Ala Trp Arg
145          150          155          160
Gly Lys

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&lt;210&gt; 6081

&lt;211&gt; 655

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6081

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gataatgatc aggaacctcc ctattcaatg ataacattac acgaaatggc agaaacagat
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120
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180
cagaaaattga ctgaaattct caatttaaata ggagaagtag cttgccagga ctcaagccat
240
cctgccaac acaggaacac atctgcagtc ctaggctgct tggccgagaa actagcaggt
300
cctgcaagta taggtttact tagcccagga atactggaat acttgctaca gtgtctgaag
360
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420
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480
gagtcctggg ctaatgatcc tgattatctg aaacgtcaag ttggtttctg tgcccagtg
540
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600
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655

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&lt;210&gt; 6082

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6082

```

Asp Asn Asp Gln Glu Pro Pro Tyr Ser Met Ile Thr Leu His Glu Met
 1          5          10          15
Ala Glu Thr Asp Glu Gly Trp Leu Asp Val Val Gln Ser Leu Ile Arg
          20          25          30
Val Ile Pro Leu Glu Asp Pro Leu Gly Pro Ala Val Ile Thr Leu Leu
          35          40          45
Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln Lys Leu Thr
          50          55          60
Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp Ser Ser His

```

```

65          70          75          80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu
          85          90          95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
          100          105          110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115          120          125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130          135          140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
          145          150          155          160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165          170          175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
          180          185          190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
          195          200          205
Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
          210          215

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<210> 6083  
 <211> 358  
 <212> DNA  
 <213> Homo sapiens

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<400> 6083
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120
aatgaaaggc taacagctttt acaagagaag ctgatcgtcg aagggcattct aaccaaagcg
180
gtagaagaaa caaagctttc aaaagaaaat cagacaagag caaaagaatc tgatttttca
240
gatactctga gtccaagcaa ggaaaaaagc agtgacgaca ctacagacgc ccaaatggat
300
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358

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<210> 6084  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

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<400> 6084
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Ala Asp Asn Asp Phe Thr Asn Glu Arg Leu Thr Ala Leu Gln Glu Lys
20          25          30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
35          40          45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
50          55          60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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65		70		75		80									
Met	Asp	Glu	Gln	Asp	Leu	Asn	Glu	Pro	Leu	Ala	Lys	Val	Ser	Leu	Leu
			85				90							95	
Lys	Asp	Asp	Leu	Gln											
			100												

&lt;210&gt; 6085

&lt;211&gt; 2307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6085

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120
ggttacgaaa cagtgggttg ccctgggtgat gttctttaca tcccaatgta ctggtggcat
180
cacatagagt cattactaaa tgggggggatt accatcactg tgaacttctg gtataagggg
240
gtccccaccc ctaagagaat tgaatatacct ctcaaagctc atcagaaaagt ggccataatg
300
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480
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720
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1260

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 2280  
 aaaaaaaaaa aaaaaaaaaa aaaaaaa  
 2307

&lt;210&gt; 6086

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6086

Met	Leu	Gly	Thr	Lys	Gly	Val	Leu	Leu	Ala	Val	Ala	Ser	Leu	Gly	Ser
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Arg	Gly	Ala	Ser	Leu	Cys	Val	Phe	Val	Cys	Val	Cys	Leu	Cys	Val	Arg
			20					25					30		
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
		35				40					45				
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
	50				55					60					
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
65					70					75				80	
Asp	Ser	Thr	Val												

<210> 6087  
<211> 1506  
<212> DNA  
<213> Homo sapiens

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1380

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<210> 6088

<211> 326

<212> PRT

<213> Homo sapiens

<400> 6088

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			20					25					30		
Pro	Gly	Asp	Leu	Leu	Ser	Ala	Arg	Leu	Leu	Ser	Gln	Glu	Lys	Arg	Ala
		35					40					45			
Ala	Glu	Thr	His	Phe	Gly	Phe	Glu	Thr	Val	Ser	Glu	Glu	Glu	Lys	Gly
	50					55					60				
Gly	Lys	Val	Tyr	Gln	Val	Phe	Glu	Ser	Val	Ala	Lys	Lys	Tyr	Asp	Val
65					70					75				80	
Met	Asn	Asp	Met	Met	Ser	Leu	Gly	Ile	His	Arg	Val	Trp	Lys	Asp	Leu
				85					90					95	
Leu	Leu	Trp	Lys	Met	His	Pro	Leu	Pro	Gly	Thr	Gln	Leu	Leu	Asp	Met
			100					105						110	
Ala	Gly	Gly	Thr	Gly	Asp	Ile	Ala	Phe	Arg	Phe	Leu	Asn	Tyr	Val	Gln
		115					120					125			
Ser	Gln	His	Gln	Arg	Lys	Gln	Lys	Arg	Gln	Leu	Arg	Ala	Gln	Gln	Asn
	130					135					140				
Leu	Ser	Trp	Glu	Glu	Ile	Ala	Lys	Glu	Tyr	Gln	Asn	Glu	Glu	Asp	Ser
145					150					155				160	
Leu	Gly	Gly	Ser	Arg	Val	Val	Val	Cys	Asp	Ile	Asn	Lys	Glu	Met	Leu
			165					170						175	
Lys	Val	Gly	Lys	Gln	Lys	Ala	Leu	Ala	Gln	Gly	Tyr	Arg	Ala	Gly	Leu
		180					185						190		
Ala	Trp	Val	Leu	Gly	Asp	Ala	Glu	Glu	Leu	Pro	Phe	Asp	Asp	Asp	Lys
	195						200					205			
Phe	Asp	Ile	Tyr	Thr	Ile	Ala	Phe	Gly	Ile	Arg	Asn	Val	Thr	His	Ile
	210					215					220				
Asp	Gln	Ala	Leu	Gln	Glu	Ala	His	Arg	Val	Leu	Lys	Pro	Gly	Gly	Arg
225				230						235				240	
Phe	Leu	Cys	Leu	Glu	Phe	Ser	Gln	Val	Asn	Asn	Pro	Leu	Ile	Ser	Arg
			245					250						255	
Leu	Tyr	Asp	Leu	Tyr	Ser	Phe	Gln	Val	Ile	Pro	Val	Leu	Gly	Glu	Val
		260					265						270		
Ile	Ala	Gly	Asp	Trp	Lys	Ser	Tyr	Gln	Tyr	Leu	Val	Glu	Ser	Ile	Arg
	275					280						285			
Arg	Phe	Pro	Ser	Gln	Glu	Glu	Phe	Lys	Asp	Met	Ile	Glu	Asp	Ala	Gly
	290				295						300				
Phe	His	Lys	Val	Thr	Tyr	Glu	Ser	Leu	Thr	Ser	Gly	Ile	Val	Ala	Ile
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His	Ser	Gly	Phe	Lys	Leu										

325

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<211> 4211  
<212> DNA  
<213> Homo sapiens

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960  
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&lt;210&gt; 6090

&lt;211&gt; 839

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6090

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Glu	Asp	Cys	Thr	Trp	Met	Gln	Glu	Tyr	Asn	Pro	Pro	Thr	Phe	Glu	Thr

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Pro Glu Leu His Thr Lys Glu Gln Ile Leu Glu Leu Leu Val Leu Glu
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Gln Phe Leu Thr Ile Leu Pro Glu Glu Phe Gln Pro Trp Val Arg Glu
  100              105              110
His His Pro Glu Ser Gly Glu Glu Ala Val Ala Val Ile Glu Asn Ile
  115              120              125
Gln Arg Glu Leu Glu Glu Arg Gln Gln Ile Val Ala Cys Pro Asp
  130              135              140
Val Leu Pro Arg Lys Met Ala Thr Pro Gly Ala Val Gln Glu Ser Cys
  145              150              155              160
Ser Pro His Pro Leu Thr Val Asp Thr Gln Pro Glu Gln Ala Pro Gln
      165              170              175
Lys Pro Arg Leu Leu Glu Glu Asn Ala Leu Pro Val Leu Gln Val Pro
  180              185              190
Ser Leu Pro Leu Lys Asp Ser Gln Glu Leu Thr Ala Ser Leu Leu Ser
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Thr Gly Ser Gln Lys Leu Val Lys Ile Glu Glu Val Ala Asp Val Ala
  210              215              220
Val Ser Phe Ile Leu Glu Trp Gly His Leu Asp Gln Ser Gln Lys
  225              230              235              240
Ser Leu Tyr Arg Asp Asp Arg Lys Glu Asn Tyr Gly Ser Ile Thr Ser
      245              250              255
Met Gly Tyr Glu Ser Arg Asp Asn Met Glu Leu Ile Val Lys Gln Ile
  260              265              270
Ser Asp Asp Ser Glu Ser His Trp Val Ala Pro Glu His Thr Glu Arg
  275              280              285
Ser Val Pro Gln Asp Pro Asp Phe Ala Glu Val Ser Asp Leu Lys Gly
  290              295              300
Met Val Gln Arg Trp Gln Val Asn Pro Thr Val Gly Lys Ser Arg Gln
  305              310              315              320
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Lys Gln Ser Thr His Gly Glu Arg Gly His Arg Cys Ser Asp Cys Gly
  340              345              350
Lys Phe Phe Leu Gln Ala Ser Asn Phe Ile Gln His Arg Arg Ile His
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Thr Gly Glu Lys Pro Phe Lys Cys Gly Glu Cys Gly Lys Ser Tyr Asn
  370              375              380
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Leu Lys Arg His Phe Arg Glu Lys Ser Gln Arg Cys Ser Asp Lys Arg
  450              455              460
Ser Lys Asn Thr Lys Leu Ser Val Lys Lys Lys Ile Ser Glu Tyr Ser

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Tyr	Val	Ser	Leu	Ile	Glu	His	Gln	Val	Leu	His	Met	Gly	Gln	Lys	Asn	
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Ile	Cys	Gly	Lys	Ala	Phe	Gly	Tyr	Ser	Ser	Asp	Leu	Ile	Gln	His	Tyr	
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Arg	Thr	His	Thr	Ala	Glu	Lys	Pro	Tyr	Gln	Cys	Asp	Ile	Cys	Arg	Glu	
			740					745					750			
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Ser	Thr	Lys	Ser	His	Gln	Cys	His	Glu	Cys	Gly	Arg	Gly	Phe	Thr	Leu	
		770				775					780					
Lys	Ser	His	Leu	Asn	Gln	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	
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<210> 6091
<211> 1336
<212> DNA
<213> Homo sapiens
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<400> 6091

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&lt;210&gt; 6092

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6092

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Thr	Pro	Asn	Trp	Tyr	Trp	Val	Leu	Gly	His	Pro	Asn	Leu	Ile	Arg	Asp
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	50				55					60					
Ser	Arg	His	Glu	Gly	Pro	Ser	Pro	Pro	Arg	Asp	Leu	Gly	Thr	Ser	Gly
65					70				75					80	
Pro	Ser	Arg	Ala	Ala	Ser	His	Lys	Pro	Ser	Asn	Glu	Gln	Arg	Asp	Ala
			85					90					95		
Gly	Gln	Gln	Leu	Gln	Leu	His	Leu	Leu	Pro	Ala	Leu	Lys	Gly	Ser	Phe
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&lt;210&gt; 6093

&lt;211&gt; 1998

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6093

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960

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 1998

&lt;210&gt; 6094

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6094

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Thr	Gly	Pro	Val	Ser	Gln	Ser	Phe	Leu	Gln	Met	Leu	Ile	Gly	Val	Cys
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Trp	Asn	Pro	Lys	Pro	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Asp	Gly	Leu	Leu
	50				55					60					
Ser	Cys	Asn	Phe	Leu	Gly	Glu	Glu	Thr	Phe	Ser	Ser	Phe	Pro	Phe	Leu
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Val	His	Pro	Cys	Thr	Leu	Val	Leu	Ser	Gln	Pro	Leu	Pro	His	Ile	Val

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 <212> DNA  
 <213> Homo sapiens

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<210> 6096  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Thr Cys Ala Ile Cys Arg Val Gln Val Met Val Val Trp Gly Glu Cys  
 50 55 60  
 Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn  
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<210> 6097  
 <211> 2404

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6097

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 1920  
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 1980  
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 gctt  
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&lt;210&gt; 6098

&lt;211&gt; 631

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6098

Arg	Phe	Val	Ala	Arg	Glu	Lys	Ile	Met	Ser	Val	Leu	Ser	Glu	Trp	Gly
1				5				10					15		
Leu	Phe	Arg	Gly	Leu	Gln	Asn	His	Pro	Met	Val	Leu	Pro	Ile	Cys	Ser
		20					25				30				
Arg	Ser	Gly	Asp	Val	Ile	Glu	Tyr	Leu	Leu	Lys	Asn	Gln	Trp	Phe	Val
	35					40				45					
Arg	Cys	Gln	Glu	Met	Gly	Ala	Arg	Ala	Ala	Lys	Ala	Val	Glu	Ser	Gly
	50				55					60					
Ala	Leu	Glu	Leu	Ser	Pro	Ser	Phe	His	Gln	Lys	Asn	Trp	Gln	His	Trp
65				70				75					80		
Phe	Ser	His	Ile	Gly	Asp	Trp	Cys	Val	Ser	Arg	Gln	Leu	Trp	Trp	Gly
		85				90						95			
His	Gln	Ile	Pro	Ala	Tyr	Leu	Val	Xaa	Xaa	Gly	Pro	Cys	Ala	Xaa	Gly
	100					105					110				
Glu	Glu	Xaa	Thr	Cys	Trp	Val	Val	Gly	Arg	Ser	Gly	Ala	Glu	Ala	Arg

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      115      120      125
Glu Leu Ala Ala Glu Leu Thr Gly Arg Gln Gly Ala Glu Pro Thr Leu
      130      135      140
Glu Arg Asp Pro Asp Val Leu Asp Thr Trp Phe Ser Ser Ala Leu Phe
145      150      155      160
Pro Phe Ser Ala Leu Gly Trp Pro Gln Glu Thr Pro Asp Leu Ala Arg
      165      170      175
Phe Tyr Pro Leu Ser Leu Leu Glu Thr Gly Ser Asp Leu Leu Leu Phe
      180      185      190
Trp Val Gly Arg Met Val Met Leu Gly Thr Gln Leu Thr Gly Gln Leu
      195      200      205
Pro Phe Ser Lys Val Leu Leu His Pro Met Val Arg Asp Arg Gln Gly
      210      215      220
Arg Lys Met Ser Lys Ser Leu Gly Asn Val Leu Asp Pro Arg Asp Ile
225      230      235      240
Ile Ser Gly Val Glu Met Gln Leu Leu Gln Glu Lys Leu Arg Ser Gly
      245      250      255
Asn Leu Asp Pro Ala Glu Leu Ala Ile Val Ala Ala Ala Gln Lys Lys
      260      265      270
Asp Phe Pro His Gly Ile Pro Glu Cys Gly Thr Asp Ala Leu Arg Phe
      275      280      285
Thr Leu Cys Ser His Gly Val Gln Ala Gly Asp Leu His Leu Ser Val
      290      295      300
Ser Glu Val Gln Ser Cys Arg His Phe Cys Asn Lys Ile Trp Asn Ala
305      310      315      320
Leu Arg Phe Ile Leu Asn Ala Leu Gly Glu Lys Phe Val Pro Gln Pro
      325      330      335
Ala Glu Glu Leu Ser Pro Ser Ser Pro Met Asp Ala Trp Ile Leu Ser
      340      345      350
Arg Leu Ala Leu Ala Ala Gln Glu Cys Glu Arg Gly Phe Leu Thr Arg
      355      360      365
Glu Leu Ser Leu Val Thr His Ala Leu His His Phe Trp Leu His Asn
      370      375      380
Leu Cys Asp Val Tyr Leu Glu Ala Val Lys Pro Val Leu Trp His Ser
385      390      395      400
Pro Arg Pro Leu Gly Pro Pro Gln Val Leu Phe Ser Cys Ala Asp Leu
      405      410      415
Gly Leu Arg Leu Leu Ala Pro Leu Met Pro Phe Leu Ala Glu Glu Leu
      420      425      430
Trp Gln Arg Leu Pro Pro Arg Pro Gly Cys Pro Pro Ala Pro Ser Ile
      435      440      445
Ser Val Ala Pro Tyr Pro Ser Ala Cys Ser Leu Glu His Trp Arg Gln
      450      455      460
Pro Glu Leu Glu Arg Arg Phe Ser Arg Val Gln Glu Val Val Gln Val
465      470      475      480
Leu Arg Ala Leu Arg Ala Thr Tyr Gln Leu Thr Lys Ala Arg Pro Arg
      485      490      495
Val Leu Leu Gln Ser Ser Glu Pro Gly Asp Gln Gly Leu Phe Glu Ala
      500      505      510
Phe Leu Glu Pro Leu Gly Thr Leu Gly Tyr Cys Gly Ala Val Gly Leu
      515      520      525
Leu Pro Pro Gly Thr Ala Ala Pro Ser Gly Trp Ala Gln Ala Pro Leu
      530      535      540
Ser Asp Thr Ala Gln Val Tyr Met Glu Leu Gln Gly Leu Val Asp Pro

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545		550		555		560									
Gln	Ile	Gln	Leu	Pro	Leu	Leu	Ala	Ala	Arg	Arg	Tyr	Lys	Leu	Gln	Lys
		565				570								575	
Gln	Leu	Asp	Ser	Leu	Thr	Ala	Arg	Thr	Pro	Ser	Glu	Gly	Glu	Ala	Gly
		580				585								590	
Thr	Gln	Arg	Gln	Gln	Lys	Leu	Ser	Ser	Leu	Gln	Leu	Glu	Leu	Ser	Lys
		595				600								605	
Leu	Asp	Lys	Ala	Ala	Ser	His	Leu	Arg	Gln	Leu	Met	Asp	Glu	Pro	Pro
	610					615					620				
Ala	Pro	Gly	Ser	Pro	Glu	Leu									
625					630										

&lt;210&gt; 6099

&lt;211&gt; 3957

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6099

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gcgcgggggt cccagccgc ccccgctgcc gtgtccctg cggccggcca gccgcgtccc
120
ccagccccgg cctcccgcg acccatgcc gcccgatcg gctactacga gatcgaccgc
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240
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1080

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2640  
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2700

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 3957

&lt;210&gt; 6100

&lt;211&gt; 1102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6100

Gly Ala Ala Gly Ala Gly Thr Gly Gly Ala Gly Pro Ala Gly Arg Leu  
 1 5 10 15  
 Leu Pro Pro Pro Ala Pro Gly Ser Pro Ala Ala Pro Ala Ala Val Ser  
 20 25 30  
 Pro Ala Ala Gly Gln Pro Arg Pro Pro Ala Pro Ala Ser Arg Gly Pro

```

      35              40              45
Met Pro Ala Arg Ile Gly Tyr Tyr Glu Ile Asp Arg Thr Ile Gly Lys
  50              55              60
Gly Asn Phe Ala Val Val Lys Arg Ala Thr His Leu Val Thr Lys Ala
  65              70              75              80
Lys Val Ala Ile Lys Ile Ile Asp Lys Thr Gln Leu Asp Glu Glu Asn
      85              90              95
Leu Lys Lys Ile Phe Arg Glu Val Gln Ile Met Lys Met Leu Cys His
  100              105              110
Pro His Ile Ile Arg Leu Tyr Gln Val Met Glu Thr Glu Arg Met Ile
  115              120              125
Tyr Leu Val Thr Glu Tyr Ala Ser Gly Gly Glu Ile Phe Asp His Leu
  130              135              140
Val Ala His Gly Arg Met Ala Glu Lys Glu Ala Arg Arg Lys Phe Lys
  145              150              155              160
Gln Ile Val Thr Ala Val Tyr Phe Cys His Cys Arg Asn Ile Val His
      165              170              175
Arg Asp Leu Lys Ala Glu Asn Leu Leu Leu Asp Ala Asn Leu Asn Ile
      180              185              190
Lys Ile Ala Asp Phe Gly Phe Ser Asn Leu Phe Thr Pro Gly Gln Leu
  195              200              205
Leu Lys Thr Trp Cys Gly Ser Pro Pro Tyr Ala Ala Pro Glu Leu Phe
  210              215              220
Glu Gly Lys Glu Tyr Asp Gly Pro Lys Val Asp Ile Trp Ser Leu Gly
  225              230              235              240
Val Val Leu Tyr Val Leu Val Cys Gly Ala Leu Pro Phe Asp Gly Ser
      245              250              255
Thr Leu Gln Asn Leu Arg Ala Arg Val Leu Ser Gly Lys Phe Arg Ile
      260              265              270
Pro Phe Phe Met Ser Thr Glu Cys Glu His Leu Ile Arg His Met Leu
      275              280              285
Val Leu Asp Pro Asn Lys Arg Leu Ser Met Glu Gln Ile Cys Lys His
  290              295              300
Lys Trp Met Lys Leu Gly Asp Ala Asp Pro Asn Phe Asp Arg Leu Ile
  305              310              315              320
Ala Glu Cys Gln Gln Leu Lys Glu Glu Arg Gln Val Asp Pro Leu Asn
      325              330              335
Glu Asp Val Leu Leu Ala Met Glu Asp Met Gly Leu Asp Lys Glu Gln
      340              345              350
Thr Leu Gln Ala Glu Gln Ala Gly Thr Ala Met Asn Ile Ser Val Pro
      355              360              365
Gln Val Gln Leu Ile Asn Pro Glu Asn Gln Ile Val Glu Pro Asp Gly
  370              375              380
Thr Leu Asn Leu Asp Ser Asp Glu Gly Glu Glu Pro Ser Pro Glu Ala
  385              390              395              400
Leu Val Arg Tyr Leu Ser Met Arg Arg His Thr Val Gly Val Ala Asp
      405              410              415
Pro Arg Thr Glu Val Met Glu Asp Leu Gln Lys Leu Leu Pro Gly Phe
      420              425              430
Pro Gly Val Asn Pro Gln Ala Pro Phe Leu Gln Val Ala Pro Asn Val
      435              440              445
Asn Phe Met His Asn Leu Leu Pro Met Gln Asn Leu Gln Pro Thr Gly
  450              455              460
Gln Leu Glu Tyr Lys Glu Gln Ser Leu Leu Gln Pro Pro Thr Leu Gln

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465                      470                      475                      480  
 Leu Leu Asn Gly Met Gly Pro Leu Gly Arg Arg Ala Ser Asp Gly Gly  
                                  485                      490                      495  
 Ala Asn Ile Gln Leu His Ala Gln Gln Leu Leu Lys Arg Pro Arg Gly  
                                  500                      505                      510  
 Pro Ser Pro Leu Val Thr Met Thr Pro Ala Val Pro Ala Val Thr Pro  
                                  515                      520                      525  
 Val Asp Glu Glu Ser Ser Asp Gly Glu Pro Asp Gln Glu Ala Val Gln  
                                  530                      535                      540  
 Ser Ser Thr Tyr Lys Asp Ser Asn Thr Leu His Leu Pro Thr Glu Arg  
 545                      550                      555                      560  
 Phe Ser Pro Val Arg Arg Phe Ser Asp Gly Ala Ala Ser Ile Gln Ala  
                                  565                      570                      575  
 Phe Lys Ala His Leu Glu Lys Met Gly Asn Asn Ser Ser Ile Lys Gln  
                                  580                      585                      590  
 Leu Gln Gln Glu Cys Glu Gln Leu Gln Lys Met Tyr Gly Gly Gln Ile  
                                  595                      600                      605  
 Asp Glu Arg Thr Leu Glu Lys Thr Gln Gln Gln His Met Leu Tyr Gln  
                                  610                      615                      620  
 Gln Glu Gln His His Gln Ile Leu Gln Gln Gln Ile Gln Asp Ser Ile  
 630                      635                      640  
 Cys Pro Pro Gln Pro Ser Pro Pro Leu Gln Ala Ala Cys Glu Asn Gln  
                                  645                      650                      655  
 Pro Ala Leu Leu Thr His Gln Leu Gln Arg Leu Arg Ile Gln Pro Ser  
                                  660                      665                      670  
 Ser Pro Pro Pro Asn His Pro Asn Asn His Leu Phe Arg Gln Pro Ser  
                                  675                      680                      685  
 Asn Ser Pro Pro Pro Met Ser Ser Ala Met Ile Gln Pro His Gly Ala  
                                  690                      695                      700  
 Ala Ser Ser Ser Gln Phe Gln Gly Leu Pro Ser Arg Ser Ala Ile Phe  
 705                      710                      715                      720  
 Gln Gln Gln Pro Glu Asn Cys Ser Ser Pro Pro Asn Val Ala Leu Thr  
                                  725                      730                      735  
 Cys Leu Gly Met Gln Gln Pro Ala Gln Ser Gln Gln Val Thr Ile Gln  
                                  740                      745                      750  
 Val Gln Glu Pro Val Asp Met Leu Ser Asn Met Pro Gly Thr Ala Ala  
                                  755                      760                      765  
 Gly Ser Ser Gly Arg Gly Ile Ser Ile Ser Pro Ser Ala Gly Gln Met  
                                  770                      775                      780  
 Gln Met Gln His Arg Thr Asn Leu Met Ala Thr Leu Ser Tyr Gly His  
 785                      790                      795                      800  
 Arg Pro Leu Ser Lys Gln Leu Ser Ala Asp Ser Ala Glu Ala His Ser  
                                  805                      810                      815  
 Leu Asn Val Asn Arg Phe Ser Pro Ala Asn Tyr Asp Gln Ala His Leu  
                                  820                      825                      830  
 His Pro His Leu Phe Ser Asp Gln Ser Arg Gly Ser Pro Ser Ser Tyr  
                                  835                      840                      845  
 Ser Pro Ser Thr Gly Val Gly Phe Ser Pro Thr Gln Ala Leu Lys Val  
                                  850                      855                      860  
 Pro Pro Leu Asp Gln Phe Pro Thr Phe Pro Pro Ser Ala His Gln Gln  
 865                      870                      875                      880  
 Pro Pro His Tyr Thr Thr Ser Ala Leu Gln Gln Ala Leu Leu Ser Pro  
                                  885                      890                      895  
 Thr Pro Pro Asp Tyr Thr Arg His Gln Gln Val Pro His Ile Leu Gln

	900		905		910										
Gly	Leu	Leu	Ser	Pro	Arg	His	Ser	Leu	Thr	Gly	His	Ser	Asp	Ile	Arg
	915		920		925		930		935		940		945		950
Leu	Pro	Pro	Thr	Glu	Phe	Ala	Gln	Leu	Ile	Lys	Arg	Gln	Gln	Gln	Gln
	930		935		940		945		950		955		960		965
Arg	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Glu	Tyr	Gln	Glu	Leu
	945		950		955		960		965		970		975		980
Phe	Arg	His	Met	Asn	Gln	Gly	Asp	Ala	Gly	Ser	Leu	Ala	Pro	Ser	Leu
	965		970		975		980		985		990		995		1000
Gly	Gly	Gln	Ser	Met	Thr	Glu	Arg	Gln	Ala	Leu	Ser	Tyr	Gln	Asn	Ala
	980		985		990		995		1000		1005		1010		1015
Asp	Ser	Tyr	His	His	Thr	Ile	Gln	Asn	Ser	Asp	Asp	Ala	Tyr	Val	Gln
	995		1000		1005		1010		1015		1020		1025		1030
Leu	Asp	Asn	Leu	Pro	Gly	Met	Ser	Leu	Val	Ala	Gly	Lys	Ala	Leu	Ser
	1010		1015		1020		1025		1030		1035		1040		1045
Ser	Ala	Arg	Met	Ser	Asp	Ala	Val	Leu	Ser	Gln	Ser	Ser	Leu	Met	Gly
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Ser	Ser	Cys	Tyr	Pro	Ser	Thr	Cys	Ile	Thr	Asp	Ile	Leu	Leu	Ser	Tyr
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Lys	His	Pro	Glu	Val	Ser	Phe	Ser	Met	Glu	Gln	Ala	Gly	Val		
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<210> 6101  
 <211> 1447  
 <212> DNA  
 <213> Homo sapiens

<400> 6101  
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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Ile His Leu Gly Pro Arg Gln Ala Val Arg Pro Ser Val Arg Ala Glu  
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 Arg Gly Arg Ser Arg Gln Ala Arg Phe Ser Pro Tyr Pro Ile Pro Ala  
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<210> 6103  
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6103

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&lt;210&gt; 6104

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6104

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      20             25             30
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      35             40             45
Glu Glu Glu Ile Val Ser Pro Ser Asp Leu Asp Leu Val Met Ser Asp
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Gly Leu Gly Met Arg Tyr Ala
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&lt;210&gt; 6105

&lt;211&gt; 1846

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6105

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1846

&lt;210&gt; 6106

&lt;211&gt; 405

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 6106

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His	Leu	Leu	Cys	Arg	Gly	Pro	Ser	Gly	Ser	Leu	Ser	Ala	Pro	Pro	Ala
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Gln	Gly	Ser	Lys	Glu	Lys	Gly	Arg	Gly	Ser	Trp	Gly	Gly	Arg	His	His
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Phe	Gln	Tyr	Gly	Asn	Tyr	Cys	Lys	Tyr	Tyr	Gly	Tyr	Arg	Asn	Pro	Ser
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Cys	Glu	Asp	Gly	Arg	Leu	Arg	Val	Leu	Lys	Pro	Glu	Trp	Phe	Arg	Gly
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Arg	Asp	Val	Leu	Asp	Leu	Gly	Cys	Asn	Val	Gly	His	Leu	Thr	Leu	Ser
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Ile	Ala	Cys	Lys	Trp	Gly	Pro	Ser	Arg	Met	Val	Gly	Leu	Asp	Ile	Asp
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Ser	Arg	Leu	Ile	His	Ser	Ala	Arg	Gln	Asn	Ile	Arg	His	Tyr	Leu	Ser
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Ala	Ser	Leu	Thr	Ala	Ser	Arg	Gly	Pro	Ile	Ala	Ala	Pro	Gln	Val	Pro
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Pro	Glu	Tyr	Asp	Val	Val	Leu	Cys	Leu	Ser	Leu	Thr	Lys	Trp	Val	His
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Leu	Asn	Trp	Gly	Asp	Glu	Gly	Leu	Lys	Arg	Met	Phe	Arg	Arg	Ile	Tyr
305					310					315					320
Arg	His	Leu	Arg	Pro	Gly	Gly	Ile	Leu	Val	Leu	Glu	Pro	Gln	Pro	Trp
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Ser	Ser	Tyr	Gly	Lys	Arg	Lys	Thr	Leu	Thr	Glu	Thr	Ile	Tyr	Lys	Asn
		340						345					350		
Tyr	Tyr	Arg	Ile	Gln	Leu	Lys	Pro	Glu	Gln	Phe	Ser	Ser	Tyr	Leu	Thr
	355					360						365			
Ser	Pro	Asp	Val	Gly	Phe	Ser	Ser	Tyr	Glu	Leu	Val	Ala	Thr	Pro	His
	370					375					380				
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Arg	Ser	Pro	Ser	His											
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 <211> 896  
 <212> DNA  
 <213> Homo sapiens

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<210> 6108  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 6108  
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 Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg  
 35 40 45  
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro  
 50 55 60  
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly  
 65 70 75 80  
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

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 <212> DNA  
 <213> Homo sapiens

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 <211> 323  
 <212> PRT  
 <213> Homo sapiens

<400> 6110  
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 Gln Lys Ala Leu Ser Leu Val Ser Cys Phe Ala Gly Gly Val Phe Leu  
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 Glu Ala Leu Ala Ala Leu His Val Thr Leu Gln Phe Pro Leu Gln Glu  
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 Phe Ile Leu Ala Met Gly Phe Phe Leu Val Leu Val Met Glu Gln Ile  
 115 120 125  
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 Arg Ala Leu Leu Gly Thr Val Asn Gly Gly Pro Gln His Trp His Asp

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		275		280		285									
Glu	Ile	Leu	Pro	Gln	Glu	Leu	Ala	Ser	Ser	Glu	Gln	Arg	Ile	Leu	Lys
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Val	Ile	Leu	Leu	Leu	Ala	Gly	Phe	Ala	Leu	Leu	Thr	Gly	Leu	Leu	Phe
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Ile	Gln	Ile													

&lt;210&gt; 6111

&lt;211&gt; 1706

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6111

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420
tggtctcaaa ctctgacct caggcgatcc acccacctca gcgtcccaaa gtgctgggat
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540
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600
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720

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 840  
 gttagtcccc cttattccac tgtggcattg ccgttctaag cagttacctg atgcctgctg  
 900  
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 960  
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 1020  
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 1080  
 aatcacccca tgtaggtgta cattgtgaca aagtgcactt gaccactaag gggccccctt  
 1140  
 ggtgacccca gcacattcac agcagtgtta aaatggcctg cattttggag atgctggctg  
 1200  
 gcctttcagt gcctcccagg aagacacatg gcctttccct cttcagatgc ctgaagggag  
 1260  
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 ctgtggacct tggctccctc cgtggacctg ggcttcgtgg tgagcactgc agcctccctg  
 1380  
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 1440  
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 1500  
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 1560  
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 1620  
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 1680  
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 1706

&lt;210&gt; 6112

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6112

Met	Ser	Leu	Phe	Cys	Phe	Val	Leu	Phe	Leu	Arg	Trp	Ser	Phe	Pro	Leu
1				5					10					15	
Val	Ala	Gln	Ala	Gly	Val	Xaa	Trp	His	Ser	Leu	Gly	Ser	Leu	Gln	Pro
			20					25					30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
		35					40					45			
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55					60				
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65					70					75				80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
				85					90					95	
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

<210> 6113  
<211> 1095  
<212> DNA  
<213> Homo sapiens

<400> 6113  
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ggtgacgcac tttaacggcgg cagcgtaagt gcgtgacgct cgtcagtggc ttcagttcac  
120  
acgtggcgcc agcggaggca ggttgatgtg tttgtgcttc cttctacagc caatatgaaa  
180  
aggcctagta agtggggctcg ggaggcgggc gtggaggggac ccacgtctgg aagttgctgc  
240  
agccaccacg acgctcttct acggctacgg ctttgtctct gctgggtatgg ggggtgggagc  
300  
atacgcgtag gccttgcccc tatttctctgg tagaaccgag agttggaagt ccctacggcg  
360  
atcatgttaa ccgcgcgggc tcattctgcg gaacgaagcc gggcagaggg tggggaagac  
420  
taggctagat ttctgtaagg aagcagcgctc tgagccaggt ttgaggccca atattttctt  
480  
tccgtggcca cgtgcagact ggcccagggt agagctgaga atcgccctccc agactcagtg  
540  
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600  
atacgtgtgt gtgtatgatc ccatttctaatt attgtgaggg taagtgcagg gaattttgac  
660  
tccattctgg atctactgaa tttaattctc tgggatttga aagtagcacg tatgtttgca  
720  
ttaggcattt cgcattagac ttaacgttag gtttggttagc caataacaca agaaaaggat  
780  
ataactccat agtgcgttaa ccagaacta atcatttggtg ttaacagatt tgtgatgtgt  
840  
ttctttgtag agttaagaa agcaagtaaa cgcattgacct gccataagcg gtataaaatc  
900  
caaaaaaagg ttcgagaaca tcattcgaaaa ttaagaaagg aggctaaaaa gcgggggtcac  
960  
aagaagccta ggaaagaccc aggagttcca aacagtgtct cctttaagga ggctcttctt  
1020  
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1080  
aggcagaagg aacta  
1095

<210> 6114  
<211> 87  
<212> PRT  
<213> Homo sapiens

<400> 6114  
Met Cys Phe Phe Val Glu Leu Lys Lys Ala Ser Lys Arg Met Thr Cys



```

      1             5             10             15
His Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys
      20             25             30
Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp
      35             40             45
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu
      50             55             60
Ala Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys
      65             70             75             80
Leu Asp Arg Gln Lys Glu Leu
      85

```

&lt;210&gt; 6115

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6115

```

gcgcgcctgg ccccgccagg gcctaagttc cctgcactcg ctcccccgcc tgtcgcccgc
60
gccgcccgcc gcagccctcc ttctcgtggg cgctggggaa gaaactcgtc ggcgggtcta
120
actgtggcgt cccagggcgg tggagggagc aacttcgggg gcacgtcctc gtaaattccg
180
tggaggacac tgacctgta cccaccctc gaggccagaa gtcggttctt ttgggggaac
240
tgaggggcga gagcactcgc cccctgact tgcaaagttg gcgtctttac ttggcctccg
300
ggattctgcg catggcgtgt ctccaggctg ctgatgggca agacagatgt gccaggtcca
360
gaatgaactt gagaagagtt tgtagccatt cctgaatcac cttatactag t
411

```

&lt;210&gt; 6116

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6116

```

Met Ala Thr Asn Ser Ser Gln Val His Ser Gly Pro Gly Thr Ser Val
      1             5             10             15
Leu Pro Ile Ser Ser Leu Glu Thr Arg His Ala Gln Asn Pro Gly Gly
      20             25             30
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala
      35             40             45
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr
      50             55             60
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu
      65             70             75             80
Leu Pro Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe
      85             90             95
Leu Pro Gln Arg Pro Arg Glu Gly Gly Leu Arg Ala Ala Ala Ala Ala
      100            105            110
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg

```

115 120 125

Arg

<210> 6117  
 <211> 962  
 <212> DNA  
 <213> Homo sapiens

<400> 6117  
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 60  
 gtggaagacg gagaggaaac ctgcgccctg gcctctcact ccgggagctc aggctccaag  
 120  
 tcgggaggcg acaagatggt ctccctcaag aagtggaaac cggtggccat gtggagctgg  
 180  
 gacgtggagt gcgatacgtg cgccatctgc aggggccagg tgatggatgc ctgtcttaga  
 240  
 tgtcaagctg aaaacaaaca agaggactgt gttgtggtct ggggagaatg taatcattcc  
 300  
 ttccacaact gctgcatgtc cctgtgggtg aaacagaaca atcgctgccc tctctgccag  
 360  
 caggactggg tgggtccaaag aatcggcaaa tgagagtggg tagaaggctt cttagcgcag  
 420  
 ttgttcagag ccctggtgga tcttgtaatc cagtgcccta caaaggctag aacactacag  
 480  
 gggatgaatt cttcaaatag gagccgatgg atctgtggtc ctttgggact catcaaagcc  
 540  
 ttggttttagc attttgtcag ttttatcttc agaaattctc tgcgattaag aagataattt  
 600  
 attaaagggtg gtccttccta cctctgtggt gtgtgtcgcg cacacagctt agaagtgcta  
 660  
 taaaaaagga aagagctcca aattgaatca cctttataat ttaccattt ctatacaaca  
 720  
 ggcagtggaa gcagtttcag agaacttttt gcatgcttat ggttgatcag ttaaaaaaga  
 780  
 atgttacagt aacaaataaa gtgcagttta aaaccaact cttactctta atttgttctt  
 840  
 aatacgtatt tttggcaggg agagggaaac gtccatgaaa tctttatgtg atataaggat  
 900  
 tttaagtttg ggccagtga cagggtaaat aaaatttaac ttttgagcat aaaaaaaaaa  
 960  
 aa  
 962

<210> 6118  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 6118  
 Met Ala Asp Val Glu Asp Gly Glu Glu Thr Cys Ala Leu Ala Ser His  
 1 5 10 15  
 Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu

```

          20          25          30
Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
          35          40          45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Asp Ala Cys Leu Arg Cys
          50          55          60
Gln Ala Glu Asn Lys Gln Glu Asp Cys Val Val Val Trp Gly Glu Cys
65          70          75          80
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
          85          90          95
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
          100          105          110
Lys

```

<210> 6119  
 <211> 375  
 <212> DNA  
 <213> Homo sapiens

```

<400> 6119
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60
ccccacacc ccacacggac tgcacggaaa tatcacagta accatctctc agtcacagcg
120
tggccccaca gaactcatgc ctgcttgctt taaaccacc aatgaaaact ccccatggga
180
aacctgcttg gataatactt tggaccccaa taaatgcttt aatcccacaa gtcctctgtc
240
tctgcctctc tcttgccct acccactggg tgagcatgtg tgtcccaaac ggccctgcaa
300
ggtgtgctgc cctgttcttt ctgggctctg tcaaggaatc aaactgtctc tggtatgtga
360
tgtgtcatgt tgtgc
375

```

<210> 6120  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

```

<400> 6120
Met Gly Lys Leu Asp Thr Ala Pro Trp Thr Cys Pro Thr Asp Pro His
1          5          10          15
Thr Pro His Gly Leu His Gly Asn Ile Thr Val Thr Ile Ser Gln Ser
          20          25          30
Gln Arg Gly Pro Thr Glu Leu Met Pro Ala Cys Phe Lys Pro Thr Asn
          35          40          45
Glu Asn Ser Pro Trp Glu Thr Cys Leu Asp Asn Thr Leu Asp Pro Asn
          50          55          60
Lys Cys Phe Asn Pro Thr Ser Pro Leu Ser Leu Pro Leu Ser Cys Pro
65          70          75          80
Tyr Pro Leu Val Glu His Val Cys Pro Lys Arg Pro Cys Lys Val Cys
          85          90          95
Cys Pro Val Leu Ser Gly Leu Cys Gln Gly Ile Lys Leu Leu Leu Leu

```

100  
Cys Asp Val Ser Cys Cys  
115

105

110

<210> 6121  
<211> 1039  
<212> DNA  
<213> Homo sapiens

<400> 6121  
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60  
ttgtaaacat tgatttgaat gatgacaaca tttgcagtgt ttgtaaactg ggaacagaca  
120  
aagaaacact ctcccttctgc cacatttgtt ttgagctaaa tattgagggg gtaccaaagt  
180  
ctgatctctt gcacacaaaa tcattaaggg gccataaaga ctgctttgaa aaataccatt  
240  
taattgcaaa ccagggttgt cctcgatcta agctttcaaa aagtacttat gaagaagtta  
300  
aaaccatddd gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg  
360  
attcagattc tgaatgttct aaaaagcccc agcatcatct gtttaatttc aggcataagc  
420  
cagaagaaaa attactccca cagtttgagt cccaagtacc aaaatattct gcaaaatgga  
480  
tagatggaag tgcagggtggc atctctaact gtacacaaag aattttggag cagagggaaa  
540  
atacagactt tggactttct atgttacaag attcagggtgc cactttatgt cgtaacagtg  
600  
tattgtggcc tcatagtcac aaccaggcac agaaaaaaga agagacaatc tctagtccag  
660  
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720  
taactacca agtgcaagaa aaagattctt tggcctcaca gctccatgtc cgccacgttg  
780  
ccatcgaaca gcttctgaag aactgttcta agttaccatg tctgcaagta gggcgaacag  
840  
gaatgaagtc gcacctaccc ataaacaact gacctaaaca gacttacttc gtatgccttg  
900  
ccctttattg gtctcccaga catgcaaact ttgaagaagt ttgaagaaag ttgtggtccg  
960  
tttttttatg gtcattaaat ttgccaaaca taaggcagta tttaacatct ttgtcaaata  
1020  
aagcagatca ttatactct  
1039

<210> 6122  
<211> 221  
<212> PRT  
<213> Homo sapiens

<400> 6122  
Met Asn Glu Glu Glu Gln Phe Val Asn Ile Asp Leu Asn Asp Asp Asn

1				5					10					15				
Ile	Cys	Ser	Val	Cys	Lys	Leu	Gly	Thr	Asp	Lys	Glu	Thr	Leu	Ser	Phe			
			20					25					30					
Cys	His	Ile	Cys	Phe	Glu	Leu	Asn	Ile	Glu	Gly	Val	Pro	Lys	Ser	Asp			
		35					40					45						
Leu	Leu	His	Thr	Lys	Ser	Leu	Arg	Gly	His	Lys	Asp	Cys	Phe	Glu	Lys			
	50					55					60							
Tyr	His	Leu	Ile	Ala	Asn	Gln	Gly	Cys	Pro	Arg	Ser	Lys	Leu	Ser	Lys			
65					70					75					80			
Ser	Thr	Tyr	Glu	Glu	Val	Lys	Thr	Ile	Leu	Ser	Lys	Lys	Ile	Asn	Trp			
			85					90					95					
Ile	Val	Gln	Tyr	Ala	Gln	Asn	Lys	Asp	Leu	Asp	Ser	Asp	Ser	Glu	Cys			
		100						105					110					
Ser	Lys	Lys	Pro	Gln	His	His	Leu	Phe	Asn	Phe	Arg	His	Lys	Pro	Glu			
	115						120					125						
Glu	Lys	Leu	Leu	Pro	Gln	Phe	Glu	Ser	Gln	Val	Pro	Lys	Tyr	Ser	Ala			
	130					135					140							
Lys	Trp	Ile	Asp	Gly	Ser	Ala	Gly	Gly	Ile	Ser	Asn	Cys	Thr	Gln	Arg			
145					150				155						160			
Ile	Leu	Glu	Gln	Arg	Glu	Asn	Thr	Asp	Phe	Gly	Leu	Ser	Met	Leu	Gln			
			165					170					175					
Asp	Ser	Gly	Ala	Thr	Leu	Cys	Arg	Asn	Ser	Val	Leu	Trp	Pro	His	Ser			
	180							185					190					
His	Asn	Gln	Ala	Gln	Lys	Lys	Glu	Thr	Ile	Ser	Ser	Pro	Glu	Ala				
	195					200					205							
Asn	Val	Gln	Thr	Gln	His	Pro	His	Tyr	Ser	Arg	Glu	Glu						
	210					215					220							

&lt;210&gt; 6123

&lt;211&gt; 900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6123

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ntgcatgcct gtataaccaca gctactcggg aggctgaggc gggagaatcg cttgaaccca
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ggaggcggag gttgcggtga gctgagatcg caccattgca ctccagcctg ggcaacaaga
120
gcgaaacaac aagagaaaaa aaaggaagct gccctctgcc caaaaccac gtcgaggtcc
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ccaaacctgg gacccttagg tcttttctca cttagcgtgc ccaaccttct cctggcagga
240
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300
ctgagacacc atctccagat tcccatccac tcccccaagg atttcttgtc tgtgatgctt
360
gaaaaaggaa gtttgtctgc catgcgtttc ctaccgccg tgaacttga gcatccagag
420
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480
ctctgggaat cctctgggag gaccttgat gactttctga cettccccag gcacgttttc
540
agggtcatga tctgcccc gcccggggga tctactgtcc tccagtcac acccctctcc
600

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ccgcaccgcc ttctgtctgt cttctcttct tcccagaatg aagacatcac cgagccgcag  
 660  
 agcatcctgg cggctgcaga gaaggctggt atgtctgcag aacaagccca gggacttctg  
 720  
 gaaaagatcg caacgccaaa ggtgaagaac cagctcaagg agaccactga ggcagcctgc  
 780  
 agatacggag cttttgggct gcccatacacc gtggcccatg tggatggcca aaccacatg  
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 ttatttggct ctgaccggat ggagctgctg gcgcacctgc tgggagagaa gtggatgggc  
 900

<210> 6124

<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

Xaa	His	Ala	Cys	Ile	Pro	Gln	Leu	Leu	Gly	Arg	Leu	Arg	Arg	Glu	Asn
1				5					10					15	
Arg	Leu	Asn	Pro	Gly	Gly	Gly	Gly	Cys	Gly	Glu	Leu	Arg	Ser	His	His
		20						25					30		
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
		35					40					45			
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
	50					55					60				
Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Leu	Ala	Gly
65				70					75						80
Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
				85					90					95	
Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
			100					105					110		
Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
		115					120					125			
Arg	Phe	Leu	Thr	Ala	Val	Asn	Leu	Glu	His	Pro	Glu	Met	Leu	Glu	Lys
	130					135					140				
Ala	Ser	Arg	Glu	Leu	Trp	Met	Arg	Val	Trp	Ser	Arg	Val	Ser	Val	Gly
145					150					155					160
Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
				165					170					175	
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Pro	Gly	Gly	Ser	Thr
			180					185					190		
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
		195					200					205			
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala
	210					215					220				
Ala	Ala	Glu	Lys	Ala	Gly	Met	Ser	Ala	Glu	Gln	Ala	Gln	Gly	Leu	Leu
225					230					235					240
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr
				245					250					255	
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala
		260						265					270		
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
		275					280					285			
Leu	Leu	Ala	His	Leu	Leu	Gly	Glu	Lys	Trp	Met	Gly				

290

295

300

&lt;210&gt; 6125

&lt;211&gt; 468

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6125

nctacagtca ctcaggagaa gtcccgcatg gaggcttctt acttggctga caagaaaaag  
60

atgaaacagg acttagagga tgccagtaac aaggcggagg aggagagggc cgcctggag  
120

ggagaattga aggggctgca ggagcaaata gcagaaacca aagccccggt tatcacgcag  
180

cagcatgac gccccaaga gcagagtac catgccttga tgctgcgtga gctccagaag  
240

ctgctgcagg aggagaggac ccagcgccag gacttggagc ttaggttaga agagacccga  
300

gaagccttgg caggacgagc atatgcagct gaacagatgg aaggatttga actgcagacc  
360

aagcagctga cccgtgaggt ggaggagctg aaaagtgaac tgcaggccat tcgagatgag  
420

aagaatcagc cagacccccg gctgcaagaa cttcaggaag aggccgcc  
468

&lt;210&gt; 6126

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6126

Xaa Thr Val Thr Gln Glu Lys Ser Arg Met Glu Ala Ser Tyr Leu Ala  
1 5 10 15

Asp Lys Lys Lys Met Lys Gln Asp Leu Glu Asp Ala Ser Asn Lys Ala  
20 25 30

Glu Glu Glu Arg Ala Arg Leu Glu Gly Glu Leu Lys Gly Leu Gln Glu  
35 40 45

Gln Ile Ala Glu Thr Lys Ala Arg Leu Ile Thr Gln Gln His Asp Arg  
50 55 60

Ala Gln Glu Gln Ser Asp His Ala Leu Met Leu Arg Glu Leu Gln Lys  
65 70 75 80

Leu Leu Gln Glu Glu Arg Thr Gln Arg Gln Asp Leu Glu Leu Arg Leu  
85 90 95

Glu Glu Thr Arg Glu Ala Leu Ala Gly Arg Ala Tyr Ala Ala Glu Gln  
100 105 110

Met Glu Gly Phe Glu Leu Gln Thr Lys Gln Leu Thr Arg Glu Val Glu  
115 120 125

Glu Leu Lys Ser Glu Leu Gln Ala Ile Arg Asp Glu Lys Asn Gln Pro  
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Asp Pro Arg Leu Gln Glu Leu Gln Glu Glu Ala Ala  
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&lt;210&gt; 6127

&lt;211&gt; 1900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6127

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&lt;210&gt; 6128

&lt;211&gt; 530

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6128

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Thr	Ile	Leu	Val	Glu	Cys	Trp	Asp	Gly	His	Leu	Thr	Pro	Pro	Glu	Val
			20					25					30		
Ala	Ser	Leu	Ala	Asp	Arg	Ala	Ser	Arg	Ala	Arg	Asp	Ser	Asn	Met	Val
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Leu	Asn	Pro	Asn	Glu	Ile	Gln	Arg	Ala	Leu	Val	Gln	Cys	Lys	Glu	Gln
65				70						75				80	
Asp	Asn	Leu	Met	Leu	Glu	Lys	Ala	Cys	Met	Ala	Val	Glu	Glu	Ala	Ala
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Lys	Gly	Gly	Gly	Val	Tyr	Pro	Glu	Val	Leu	Phe	Glu	Val	Ala	His	Gln
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Trp	Phe	Trp	Leu	Tyr	Glu	Gln	Thr	Ala	Gly	Gly	Ser	Ser	Thr	Ala	Arg
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Glu	Gly	Ala	Thr	Ser	Cys	Ser	Ala	Ser	Gly	Ile	Arg	Ala	Gly	Gly	Glu
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Ala	Gly	Arg	Gly	Met	Pro	Glu	Gly	Arg	Gly	Gly	Pro	Gly	Thr	Glu	Pro
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Val	Thr	Val	Ala	Ala	Ala	Ala	Val	Thr	Ala	Ala	Ala	Thr	Val	Val	Pro
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305                310                315                320
Ser Leu Pro Ala Leu Thr Thr Gln Pro Ser Pro Leu Val Ser Gly Gly
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Phe Pro Pro Pro Glu Glu Glu Thr His Ser Gln Pro Val Asn Pro His
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Glu Met Leu Gly Arg Arg Ala His Asn Asp His Pro Asn Asn Phe Ser
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Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys Trp Leu Leu Gly Leu Ala
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Ala Lys Leu Gly Val Asn Tyr Val His Gln Phe Cys Val Gly Ala Ala
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Lys Gly Val Leu Ser Pro Phe Val Leu Gln Glu Ile Val Met Glu Thr
      420                425                430
Leu Gln Arg Leu Ser Pro Ala His Ala His Asn His Leu Arg Ala Pro
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Ala Phe His Gln Leu Val Gln Arg Cys Gln Gln Ala Tyr Met Gln Tyr
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Ile His His Arg Leu Ile His Leu Thr Pro Ala Asp Tyr Asp Asp Phe
465                470                475                480
Val Asn Ala Ile Arg Ser Ala Arg Ser Ala Phe Cys Leu Thr Pro Met
      485                490                495
Gly Met Met Gln Phe Asn Asp Ile Leu Gln Asn Leu Lys Arg Ser Lys
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Gln Thr Lys Glu Leu Trp Gln Arg Val Ser Leu Glu Met Ala Thr Phe
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Ser Pro
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&lt;210&gt; 6129

&lt;211&gt; 2012

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6129

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<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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 35          40          45
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Thr Tyr Ile Phe Val Tyr Glu Asn Pro Ile Ser Leu Leu Cys Gly Ala
 65          70          75          80
Ile Ile Ile Trp Arg Phe Ala Gly Asn Phe Glu Arg Thr Val Gly Thr
 85          90          95
Val Arg His Cys Phe Phe Thr Val Ile Phe Ala Ile Phe Ser Ala Ile
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Ile Phe Leu Ser Phe Glu Ala Val Ser Ser Leu Ser Lys Leu Gly Glu
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Val Glu Asp Ala Arg Gly Phe Thr Pro Val Ala Phe Ala Met Leu Gly
 130         135         140
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 145         150         155         160
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 180         185         190
Gly Leu Ala Tyr Gly Leu Thr Tyr Cys Tyr Ser Ile Asp Leu Ser Glu
 195         200         205
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 210         215         220
Arg Ile Ser Val Phe Lys Tyr Val Ser Gly Ser Ser Ala Glu Arg Arg
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Gln Ser Cys His Pro His Leu Ser Pro Ser His Pro Val Ser Gln Thr
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<210> 6131  
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&lt;210&gt; 6132

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6132

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&lt;211&gt; 4156

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6133

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&lt;210&gt; 6134

&lt;211&gt; 595

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6134

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Pro	Asp	Val	Gly	Gly	Gly	Trp	Leu	Glu	Gly	Arg	Asn	Ile	Lys	Gly	Glu
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Arg	Gly	Leu	Val	Pro	Thr	Asp	Tyr	Val	Glu	Ile	Leu	Pro	Ser	Asp	Gly
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Lys	Asp	Gln	Phe	Ser	Cys	Gly	Asn	Ser	Val	Ala	Asp	Gln	Ala	Phe	Leu
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Lys	Glu	Tyr	Gln	Lys	Ile	Gly	Lys	Ala	Leu	Gln	Ser	Leu	Ala	Thr	Val	
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<212> DNA  
<213> Homo sapiens

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<210> 6138

<211> 550

<212> PRT

<213> Homo sapiens

<400> 6138

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			20					25					30		
Arg	Lys	Glu	Ala	Lys	Lys	Gln	Gly	His	Lys	Lys	Pro	Arg	Lys	Asp	Pro
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Gly	Val	Pro	Asn	Ser	Ala	Pro	Phe	Lys	Glu	Ala	Leu	Leu	Arg	Glu	Ala
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Glu	Leu	Arg	Lys	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Gln	Gln	Gln	Lys	Leu
65				70					75					80	
Asp	Arg	Gln	Lys	Glu	Leu	Glu	Lys	Lys	Arg	Lys	Leu	Glu	Thr	Asn	Pro
			85						90					95	
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Gln	Val	Glu	Glu	Ala	Ile	Val	Gln	Ser	Gly	Gln	Lys	Lys	Leu	Val	Leu
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<210> 6139

<211> 2249

<212> DNA

<213> Homo sapiens

<400> 6139

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&lt;210&gt; 6140

&lt;211&gt; 381

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6140

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Arg	Leu	Phe	Glu	Asn	Gln	Leu	Val	Gly	Pro	Glu	Ser	Ile	Ala	His	Ile
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Glu	Asn	Gly	Glu	Ile	Glu	Thr	Ile	Ala	Arg	Phe	Xaa	Phe	Gly	Pro	Xaa
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Ile Ser Glu Val His Glu His Asp Gly His Leu Tyr Leu Gly Ser Phe				
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&lt;210&gt; 6141

&lt;211&gt; 5651

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6141

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<400> 6142

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Val His Leu Met Asn Pro Glu Tyr Val Pro Lys Pro Cys Cys Ala Pro
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Ile Thr Leu Lys Lys Tyr Arg Asn Met Val Val Arg Ala Cys Gly Tyr
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&lt;210&gt; 6143

&lt;211&gt; 1137

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6143

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1852

&lt;210&gt; 6148

&lt;211&gt; 410

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6148

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Met Val Glu Ser Ser Arg His Asn Trp Ser Gly Leu Asp Lys Gln Ser
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Asp Ile Gln Asn Leu Asn Glu Glu Arg Ile Leu Ala Leu Gln Leu Cys
 20          25          30
Gly Trp Ile Lys Lys Gly Thr Asp Val Asp Val Gly Pro Phe Leu Asn
 35          40          45
Ser Leu Val Gln Glu Gly Glu Trp Glu Arg Ala Ala Ala Val Ala Leu
 50          55          60
Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
 65          70          75          80
Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
 85          90          95
Ser Gly Tyr Thr Asp Glu Lys Asn Ser Leu Trp Arg Glu Met Cys Ser
 100          105          110
Thr Leu Arg Leu Gln Leu Asn Asn Pro Tyr Leu Cys Val Met Phe Ala
 115          120          125
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 130          135          140
Lys Val Ala Val Arg Asp Arg Val Ala Phe Ala Cys Lys Phe Leu Ser
 145          150          155          160
Asp Thr Gln Leu Asn Arg Tyr Ile Glu Lys Leu Thr Asn Glu Met Lys
 165          170          175
Glu Ala Gly Asn Leu Glu Gly Ile Leu Leu Thr Gly Leu Thr Lys Asp
 180          185          190
Gly Val Asp Leu Met Glu Ser Tyr Val Asp Arg Thr Gly Asp Val Gln
 195          200          205
Thr Ala Ser Tyr Cys Met Leu Gln Gly Ser Pro Leu Asp Val Leu Lys
 210          215          220
Asp Glu Arg Val Gln Tyr Trp Ile Glu Asn Tyr Arg Asn Leu Leu Asp
 225          230          235          240
Ala Trp Arg Phe Trp His Lys Arg Ala Glu Phe Asp Ile His Arg Ser
 245          250          255
Lys Leu Asp Pro Ser Ser Lys Pro Leu Ala Gln Val Phe Val Ser Cys
 260          265          270
Asn Phe Cys Gly Lys Ser Ile Ser Tyr Ser Cys Ser Ala Val Pro His
 275          280          285
Gln Gly Arg Gly Phe Ser Gln Tyr Gly Val Ser Gly Ser Pro Thr Lys
 290          295          300
Ser Lys Val Thr Ser Cys Pro Gly Cys Arg Lys Pro Leu Pro Arg Cys
 305          310          315          320
Ala Leu Cys Leu Ile Asn Met Gly Thr Pro Val Ser Ser Cys Pro Gly
 325          330          335
Gly Thr Lys Ser Asp Glu Lys Val Asp Leu Ser Lys Asp Lys Lys Leu
 340          345          350
Ala Gln Phe Asn Asn Trp Phe Thr Trp Cys His Asn Cys Arg His Gly
 355          360          365
Gly His Ala Gly His Met Leu Ser Trp Phe Arg Asp His Ala Glu Cys
 370          375          380
Pro Val Ser Ala Cys Thr Cys Lys Cys Met Gln Leu Asp Thr Thr Gly

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385                                      390                                      395                                      400  
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<210> 6149  
 <211> 1949  
 <212> DNA  
 <213> Homo sapiens

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 1920  
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 1949

&lt;210&gt; 6150

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6150

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			20					25					30		
Lys	Val	Ser	Leu	Thr	Lys	Thr	Pro	Lys	Leu	Glu	Arg	Gly	Asp	Gly	Gly
		35				40						45			
Lys	Glu	Val	Arg	Glu	Arg	Ala	Ser	Lys	Arg	Lys	Leu	Pro	Phe	Thr	Ala
	50					55					60				
Gly	Ala	Asn	Gly	Glu	Gln	Lys	Asp	Ser	Asp	Thr	Glu	Lys	Gln	Gly	Pro
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Glu	Arg	Lys	Arg	Ile	Lys	Lys	Glu	Pro	Val	Thr	Arg	Lys	Ala	Gly	Leu
				85					90					95	
Leu	Phe	Gly	Met	Gly	Leu	Ser	Gly	Ile	Arg	Ala	Gly	Tyr	Pro	Leu	Ser
			100					105					110		
Glu	Arg	Gln	Gln	Val	Ala	Leu	Leu	Met	Gln	Met	Thr	Ala	Glu	Glu	Ser
		115					120					125			
Ala	Asn	Ser	Pro	Val	Asp	Thr	Thr	Pro	Lys	His	Pro	Ser	Gln	Ser	Thr
		130				135					140				
Val	Cys	Gln	Lys	Gly	Thr	Pro	Asn	Ser	Ala	Ser	Lys	Thr	Lys	Asp	Lys
145					150					155					160
Leu	Asn	Lys	Arg	Asn	Glu	Arg	Gly	Glu	Thr	Arg	Leu	His	Arg	Ala	Ala
				165					170					175	
Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
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<210> 6151
<211> 648
<212> DNA
<213> Homo sapiens
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<210> 6152

<211> 130

<212> PRT

<213> Homo sapiens

<400> 6152

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			20					25					30		
Glu	Arg	Val	Ala	Phe	Ser	Leu	Phe	Thr	His	Thr	Cys	Thr	Gln	Pro	Leu
		35					40					45			
Ala	Gly	Thr	Val	Asp	Thr	His	Leu	Pro	Ser	Leu	Leu	Leu	Pro	Val	Ile
	50					55					60				
Leu	His	Pro	Leu	Gly	Ala	Ala	Ser	Ala	Gly	Arg	Ala	Leu	Glu	Pro	Lys
65					70				75					80	
Ala	Asp	Pro	His	Thr	Cys	Pro	Tyr	Gly	Arg	Lys	Glu	Ser	Arg	Gly	Glu
			85					90						95	
Lys	Val	Arg	Arg	Gly	Arg	Ala	Lys	Ser	Asn	Ser	Gly	Pro	Asn	Val	Pro
		100						105					110		
Gly	Pro	Pro	Ala	Ala	Pro	Gln	Ser	Leu	Lys	Ser	Gly	Ser	Pro	Ser	Thr
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<210> 6153

<211> 1810

<212> DNA

<213> Homo sapiens

<400> 6153

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<210> 6154  
 <211> 388  
 <212> PRT  
 <213> Homo sapiens

<400> 6154

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Ser Arg Ala Tyr Arg Phe Thr Gly His Lys Asp Ala Val Thr Cys Val
          35          40          45
Asn Phe Ser Pro Ser Gly His Leu Leu Ala Ser Gly Ser Arg Asp Lys
          50          55          60
Thr Val Arg Ile Trp Val Pro Asn Val Lys Gly Glu Ser Thr Val Phe
65          70          75          80
Arg Ala His Thr Ala Thr Val Arg Ser Val His Phe Cys Ser Asp Gly
          85          90          95
Gln Ser Phe Val Thr Ala Ser Asp Asp Lys Thr Val Lys Val Trp Ala
          100          105          110
Thr His Arg Gln Lys Phe Leu Phe Ser Leu Ser Gln His Ile Asn Trp
          115          120          125
Val Arg Cys Ala Lys Phe Ser Pro Asp Gly Arg Leu Ile Val Ser Ala
          130          135          140
Ser Asp Asp Lys Thr Val Lys Leu Trp Asp Lys Ser Ser Arg Glu Cys
145          150          155          160
Val His Ser Tyr Cys Glu His Gly Gly Phe Val Thr Tyr Val Asp Phe
          165          170          175
His Pro Ser Gly Thr Cys Ile Ala Ala Ala Gly Met Asp Asn Thr Val
          180          185          190
Lys Val Trp Asp Val Arg Thr His Arg Leu Leu Gln His Tyr Gln Leu
          195          200          205
His Ser Ala Ala Val Asn Gly Leu Ser Phe His Pro Ser Gly Asn Tyr
          210          215          220
Leu Ile Thr Ala Ser Ser Asp Ser Thr Leu Lys Ile Leu Asp Leu Met
225          230          235          240
Glu Gly Arg Leu Leu Tyr Thr Leu His Gly His Gln Gly Pro Ala Thr
          245          250          255
Thr Val Ala Phe Ser Arg Thr Gly Glu Tyr Phe Ala Ser Gly Gly Ser
          260          265          270
Asp Glu Gln Val Met Val Trp Lys Ser Asn Phe Asp Ile Val Asp His
          275          280          285
Gly Glu Val Thr Lys Val Pro Arg Pro Pro Ala Thr Leu Ala Ser Ser
          290          295          300
Met Gly Asn Leu Pro Glu Val Asp Phe Pro Val Pro Pro Gly Arg Gly
305          310          315          320
Trp Ser Val Glu Ser Val Gln Ser Gln Pro Gln Glu Pro Val Ser Val
          325          330          335
Pro Gln Thr Leu Thr Ser Thr Leu Glu His Ile Val Gly Gln Leu Asp
          340          345          350
Val Leu Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr
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<210> 6155  
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<212> DNA  
<213> Homo sapiens

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900  
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<210> 6156  
<211> 164  
<212> PRT  
<213> Homo sapiens

<400> 6156  
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&lt;210&gt; 6158

&lt;211&gt; 455

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6158

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Ala	Val	Leu	His	Asp	Gly	Arg	Thr	Val	Ala	Val	Lys	Val	Gln	His	Pro			
			100					105					110					
Lys	Val	Arg	Ala	Gln	Ser	Ser	Lys	Asp	Ile	Leu	Leu	Met	Glu	Val	Leu			
		115					120					125						
Val	Leu	Ala	Val	Lys	Gln	Leu	Phe	Pro	Glu	Phe	Glu	Phe	Met	Trp	Leu			
	130					135					140							
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Pro	His	Pro	Gly	Asn	Val	Leu	Val	Arg	Lys	His	Pro	Gly	Thr	Gly	Lys			
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Ala	Glu	Ile	Val	Leu	Leu	Asp	His	Gly	Leu	Tyr	Gln	Met	Leu	Thr	Glu			
			260					265					270					
Glu	Phe	Arg	Leu	Asn	Tyr	Cys	His	Leu	Trp	Gln	Ser	Leu	Ile	Trp	Thr			
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455

&lt;210&gt; 6159

&lt;211&gt; 4310

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6159

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 4310

&lt;210&gt; 6160

&lt;211&gt; 551

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6160

Leu	Glu	Val	Arg	Ala	Gly	Pro	Asp	Ser	Ala	Gly	Ile	Ala	Leu	Tyr	Ser
1				5					10					15	
His	Glu	Asp	Val	Cys	Val	Phe	Lys	Cys	Ser	Val	Ser	Arg	Glu	Thr	Glu



			20					25					30			
Cys	Ser	Arg	Val	Gly	Lys	Gln	Ser	Phe	Ile	Ile	Thr	Leu	Gly	Cys	Asn	
		35					40					45				
Ser	Val	Leu	Ile	Gln	Phe	Ala	Thr	Pro	Asn	Asp	Phe	Cys	Ser	Phe	Tyr	
	50					55					60					
Asn	Ile	Leu	Lys	Thr	Cys	Arg	Gly	His	Thr	Leu	Glu	Arg	Ser	Val	Phe	
65					70					75					80	
Ser	Glu	Arg	Thr	Glu	Glu	Ser	Ser	Ala	Val	Gln	Tyr	Phe	Gln	Phe	Tyr	
				85					90					95		
Gly	Tyr	Leu	Ser	Gln	Gln	Gln	Asn	Met	Met	Gln	Asp	Tyr	Val	Arg	Thr	
		100						105					110			
Gly	Thr	Tyr	Gln	Arg	Ala	Ile	Leu	Gln	Asn	His	Thr	Asp	Phe	Lys	Asp	
		115					120					125				
Lys	Ile	Val	Leu	Asp	Val	Gly	Cys	Gly	Ser	Gly	Ile	Leu	Ser	Phe	Phe	
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Ala	Ala	Gln	Ala	Gly	Ala	Arg	Lys	Ile	Tyr	Ala	Val	Glu	Ala	Ser	Thr	
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				165					170					175		
Arg	Ile	Val	Val	Ile	Pro	Gly	Lys	Val	Glu	Glu	Val	Ser	Leu	Pro	Glu	
			180					185					190			
Gln	Val	Asp	Ile	Ile	Ile	Ser	Glu	Pro	Met	Gly	Tyr	Met	Leu	Phe	Asn	
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Glu	Arg	Met	Leu	Glu	Ser	Tyr	Leu	His	Ala	Lys	Lys	Tyr	Leu	Lys	Pro	
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Ser	Gly	Asn	Met	Phe	Pro	Thr	Ile	Gly	Asp	Val	His	Leu	Ala	Pro	Phe	
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Thr	Asp	Glu	Gln	Leu	Tyr	Met	Glu	Gln	Phe	Thr	Lys	Ala	Asn	Phe	Trp	
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Arg	Ile	Leu	Met	Ala	Lys	Ser	Val	Lys	Tyr	Thr	Val	Asn	Phe	Leu	Glu	
	290					295					300					
Ala	Lys	Glu	Gly	Asp	Leu	His	Arg	Ile	Glu	Ile	Pro	Phe	Lys	Phe	His	
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Met	Leu	His	Ser	Gly	Leu	Val	His	Gly	Leu	Ala	Phe	Trp	Phe	Asp	Val	
				325					330					335		
Ala	Phe	Ile	Gly	Ser	Ile	Met	Thr	Val	Trp	Leu	Ser	Thr	Ala	Pro	Thr	
			340					345					350			
Glu	Pro	Leu	Thr	His	Trp	Tyr	Gln	Val	Arg	Cys	Leu	Phe	Gln	Ser	Pro	
		355					360					365				
Leu	Phe	Ala	Lys	Ala	Gly	Asp	Thr	Leu	Ser	Gly	Thr	Cys	Leu	Leu	Ile	
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450		455		460
Ser Val Ile Ala Ser Gly Ser Ser Val Gly His Asn Asn Leu Ile Pro				
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Leu Ala Asn Thr Gly Ile Val Asn His Thr His Ser Arg Met Gly Ser				
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Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser				
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Gly Gly Gly Ser Thr Ser Ala His Tyr Ala Val Asn Ser Gln Phe Thr				
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Met Gly Gly Pro Ala Ile Ser Met Ala Ser Pro Met Ser Ile Pro Thr				
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Asn Thr Met His Tyr Gly Ser				
545		550		

&lt;210&gt; 6161

&lt;211&gt; 1489

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6161

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1020

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&lt;210&gt; 6162

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6162

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			20				25						30		
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Thr	Leu	Gly	Gly	Arg	Ser	Lys	Glu	Ile	Thr						
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&lt;210&gt; 6163

&lt;211&gt; 713

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6163

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 660  
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 713

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<211> 120

<212> PRT

<213> Homo sapiens

<400> 6164

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			20				25						30		
Pro	Leu	Pro	Gly	Lys	Ala	Gly	Leu	Ala	Leu	Leu	Lys	Pro	Gln	Ser	Arg
		35				40						45			
Ser	Asp	Gly	Tyr	Arg	Tyr	Leu	Gly	Lys	Asp	Thr	Val	Asp	Gly	Leu	Asp
	50					55					60				
Ser	Ser	Leu	Leu	Lys	Cys	Thr	Arg	Arg	Cys	Met	Arg	Gly	Phe	Arg	Leu
65				70					75					80	
Pro	Glu	Lys	Gln	Pro	Ser	Lys	Thr	Arg	Val	Ser	Phe	Leu	Glu	Ser	Lys
			85					90						95	
Arg	Lys	Glu	Gly	Ser	Gly	Trp	Leu	His	Trp	Ser	Val	Thr	Arg	Ser	Gly
			100				105						110		
Ala	Phe	Arg	Leu	Lys	Val	Thr	Val								
			115				120								

<210> 6165

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 6165

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 120  
 atccagcggc tgcgggacac ggaagagatg ttaagcaaga aacaggagtt cctggagaag  
 180  
 aaaatcgagc aggagctgac ggccgccaag aagcacggca ccaaaaacaa gcgcgcggcc  
 240  
 ctccaggcac tgaagcgtaa gaagaggtat gagaagcagc tggcgcagat cgacggcaca  
 300  
 ttatcaacca tcgagttcca gcgggaggcc ctggagaatg ccaacaccaa caccgaggtg  
 360  
 ctcaagaaca tgggctatgc cgccaaggcc atgaaggcgg cccatgacaa catggacatc  
 420  
 gataaagttg atgagttaat gcaggacatt gctgaccagc aagaacttgc agaggagatt  
 480

tcaacagcaa tttcgaaacc tgtaggggtt ggagaagagt ttgacgagga tgagctcatg  
 540  
 gcggaattag aagaactaga acaggaggaa ctagacaaga atttgctgga aatcagtgga  
 600  
 cccgaaacag tccctctacc aaatgttccc tctatagccc taccatcaaa acccgccaag  
 660  
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 720  
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 780  
 gtgcgtgtgt ggggcaggca ggatgtggtg caggcaggtt ccacgccttt cgactctcac  
 840  
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 900  
 gttggccggg gggagggggg cgagcgggct ggcacgtgcc tgctgtttat aatgttgaat  
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 1004

<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

Pro	Ser	Arg	Ile	Gly	Arg	Arg	Arg	Pro	Ala	Arg	Arg	Ala	Ala	Thr	Met
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Ser	Val	Phe	Gly	Lys	Leu	Phe	Gly	Ala	Gly	Gly	Gly	Lys	Ala	Gly	Lys
			20					25					30		
Gly	Gly	Pro	Thr	Pro	Gln	Glu	Ala	Ile	Gln	Arg	Leu	Arg	Asp	Thr	Glu
		35					40					45			
Glu	Met	Leu	Ser	Lys	Lys	Gln	Glu	Phe	Leu	Glu	Lys	Lys	Ile	Glu	Gln
	50					55					60				
Glu	Leu	Thr	Ala	Ala	Lys	Lys	His	Gly	Thr	Lys	Asn	Lys	Arg	Ala	Ala
65					70					75					80
Leu	Gln	Ala	Leu	Lys	Arg	Lys	Lys	Arg	Tyr	Glu	Lys	Gln	Leu	Ala	Gln
			85					90						95	
Ile	Asp	Gly	Thr	Leu	Ser	Thr	Ile	Glu	Phe	Gln	Arg	Glu	Ala	Leu	Glu
			100					105					110		
Asn	Ala	Asn	Thr	Asn	Thr	Glu	Val	Leu	Lys	Asn	Met	Gly	Tyr	Ala	Ala
		115					120					125			
Lys	Ala	Met	Lys	Ala	Ala	His	Asp	Asn	Met	Asp	Ile	Asp	Lys	Val	Asp
	130					135				140					
Glu	Leu	Met	Gln	Asp	Ile	Ala	Asp	Gln	Gln	Glu	Leu	Ala	Glu	Glu	Ile
145				150					155					160	
Ser	Thr	Ala	Ile	Ser	Lys	Pro	Val	Gly	Phe	Gly	Glu	Glu	Phe	Asp	Glu
			165					170					175		
Asp	Glu	Leu	Met	Ala	Glu	Leu	Glu	Glu	Leu	Glu	Gln	Glu	Glu	Leu	Asp
		180					185					190			
Lys	Asn	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Glu	Thr	Val	Pro	Leu	Pro	Asn
	195						200					205			
Val	Pro	Ser	Ile	Ala	Leu	Pro	Ser	Lys	Pro	Ala	Lys	Lys	Lys	Glu	Glu
	210				215						220				
Glu	Asp	Asp	Asp	Met	Lys	Glu	Leu	Glu	Asn	Trp	Ala	Gly	Ser	Met	

225

230

235

&lt;210&gt; 6167

&lt;211&gt; 1220

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6167

ngccatacag catttttagtt ttgttctttc cattaactga agtcacgagg tatgcctcct  
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tggaactcc aacagttaag agattctcat gtattccatg aaataaaaag caaagaaaaa  
120  
tcaaacttgt cttaatgaga tggaagtgtt ggatcaaaca ctgattgagc tgttctatgt  
180  
cctccacttc ccagtgctt tctctcctcc cgggtctgcg cggacgcggc ctccctacct  
240  
catttgctcct cgccccctcc cgtccctcta cgcgttttgg tccctgtttg gtgctttctg  
300  
tttgagcta cggcagtgag tatgtatgtg acggaccccg agtcacccgc ggccctgggac  
360  
ccctgcctac cctccgtctc gccagccgag ctgtggaact agcgcgtgcc ccctcgccga  
420  
cctcggcgtc tccggtccgc cctcacttg tggtagggcg cagctcctgg tccctcagct  
480  
gcgcgccgcc ccacgcggcc gggctgcggg tctagggggg ccgcatctcc ctggctttcc  
540  
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600  
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660  
cgcgagggtc cgggcgcgcc gagagagagt ccagtctttg aggaccgagt agtcctgggc  
720  
cacctcccgc ctctgctgtc agaagcagca gctgccgccg tggaatccaa aatttcggga  
780  
gctgtgaccc tttcctcatg taaaacgagt agtcttggac gatctgggca taggaaccaa  
840  
tcagaaacaa tcgcttcagc aatcaagacc attgttcac atggaggaac ccatggatac  
900  
ctctgagcct ctatctgcat taccattcac tgggcagcag tcttttgagc caagtggcaa  
960  
atttggacag tatccatcga tgcagatgaa ccacatccag gcaactgggga agtggaggac  
1020  
atagaacagc tcaatcagtg tttgatccaa cacttccatc tcattaagac aagtttgatt  
1080  
tttctttgct ttttatttca tggaatacat gagaatctct taactgttgg agtttccaag  
1140  
gaggcatacc tcatgacttc agttaatgga aagaacaaaa ctaaaatgct gtatggccaa  
1200  
agccacaaag ggaaggatcc  
1220

&lt;210&gt; 6168

&lt;211&gt; 90

&lt;212&gt; PRT

<213> Homo sapiens

<400> 6168

Ala	Lys	Trp	Gln	Ile	Trp	Thr	Val	Ser	Ile	Asp	Ala	Asp	Glu	Pro	His
1			5					10					15		
Pro	Gly	Thr	Gly	Glu	Val	Glu	Asp	Ile	Glu	Gln	Leu	Asn	Gln	Cys	Leu
		20					25				30				
Ile	Gln	His	Phe	His	Leu	Ile	Lys	Thr	Ser	Leu	Ile	Phe	Leu	Cys	Phe
		35					40				45				
Leu	Phe	His	Gly	Ile	His	Glu	Asn	Leu	Leu	Thr	Val	Gly	Val	Ser	Lys
	50					55				60					
Glu	Ala	Tyr	Leu	Met	Thr	Ser	Val	Asn	Gly	Lys	Asn	Lys	Thr	Lys	Met
65					70				75						80
Leu	Tyr	Gly	Gln	Ser	His	Lys	Gly	Lys	Asp						
				85					90						

<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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120
cagtgacccc aggcttttta tggctgtgaa acacgttaaa atttcagggt aagacgtgac
180
cttttgaggt gactataact gaagattgct ttacagaagc ccaaaaaggt tttttgagtc
240
atgatgcaag aatctgggac tgagacaaaa agtaacgggt cagccatcca gaatgggtcg
300
ggcggcagca accacttact agagtgcggc ggtcttcggg aggggcggtc caacggagag
360
acgccggccg tggacatcgg ggcagctgac ctgcgccacg cccagcagca gcagcaacag
420
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480
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540
agatgagtgg acctgtgtgt cagcctaacc cttccccatt ttgaataaaa ttattctttg
600
gagaaatggt tcccactgct ttcattgcaa aataaaaatt aaacgaaaaa cagcttaagc
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720

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<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

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1				5					10					15			
Gln	Asn	Gly	Ser	Gly	Gly	Ser	Asn	His	Leu	Leu	Glu	Cys	Gly	Gly	Leu		
			20					25					30				
Arg	Glu	Gly	Arg	Ser	Asn	Gly	Glu	Thr	Pro	Ala	Val	Asp	Ile	Gly	Ala		
		35				40						45					
Ala	Asp	Leu	Ala	His	Ala	Gln	Gln	Gln	Gln	Gln	Trp	His	Leu	Ile			
	50				55						60						
Asn	His	Gln	Pro	Ser	Arg	Ser	Pro	Ser	Ser	Trp	Leu	Lys	Arg	Leu	Ile		
65					70					75				80			
Ser	Ser	Pro	Trp	Glu	Leu	Glu	Val	Leu	Gln	Val	Pro	Cys	Gly	Glu	Gln		
				85				90						95			
Leu	Leu	Arg	Arg	Arg													
			100														

&lt;210&gt; 6171

&lt;211&gt; 1130

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6171

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60
agagaaacgc aggttgctgc gtggttaaaa aaaatatttg gagatcatcc tattccacag
120
tatgaggtga acccacggac cacagagatt ttacatcacc tttcagaacg caacagggtc
180
cgggacaggg atgtctacct ggtaatagag gacttgaagc agaaagcaag tgaatacagag
240
tcagaagcca agtatcttca agaccttctc atggagagtg tgaatttttc ccccgccaat
300
ctctctagca ctggttccag gtatctgaat gctttggttg acagtgcggt ggcccttgaa
360
acaaaggata cctcgctagc tagttttatc cctgcagtga atgatttgac ctctgatctc
420
tttcgtacca aatccaaaag tgaagaaatc aagattgaac tggaaaaact tgaaaaaat
480
ttaactgcaa ctttagtatt agaaaaatgt ctacaagagg atgtcaagaa agcagagttg
540
catctgtcta cagaaagggc caaagttgat aatcgtcgtc agaacatgga ctttctaaaa
600
gcaaagtcag aggaattcag atttggaatc aaggctgcag aggagcaact ttcagccaga
660
ggcatggatg cttctctgtc tcatcagtc ttagtagcac tatcagagaa actggcaaga
720
ttaaagcaac agactatacc tttgaagaaa aaattggagt cctattttaga cttaatgccg
780
aatccgtctc ttgctcaagt gaaaattgaa gaagcaaagc gagaactaga tagcattgaa
840
gctgaactta caagaagagt agacatgatg gaactgtgac aaaagccaaa taaacatcct
900
tttccctaac aaagtaaatt gaataggact ttacagagtt ctttttctc ttggcatttc
960
ctaataacaa aactttctgt gttcttagat tacagaatat cataattgat agaatatggt
1020

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ttcttactgt gtgttgcat tttgtgccca aatacatagt tttcatatta aaaagccttt  
 1080  
 tctcttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1130

<210> 6172  
 <211> 292  
 <212> PRT  
 <213> Homo sapiens

<400> 6172  
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 20 25 30  
 Phe Gly Asp His Pro Ile Pro Gln Tyr Glu Val Asn Pro Arg Thr Thr  
 35 40 45  
 Glu Ile Leu His His Leu Ser Glu Arg Asn Arg Val Arg Asp Arg Asp  
 50 55 60  
 Val Tyr Leu Val Ile Glu Asp Leu Lys Gln Lys Ala Ser Glu Tyr Glu  
 65 70 75 80  
 Ser Glu Ala Lys Tyr Leu Gln Asp Leu Leu Met Glu Ser Val Asn Phe  
 85 90 95  
 Ser Pro Ala Asn Leu Ser Ser Thr Gly Ser Arg Tyr Leu Asn Ala Leu  
 100 105 110  
 Val Asp Ser Ala Val Ala Leu Glu Thr Lys Asp Thr Ser Leu Ala Ser  
 115 120 125  
 Phe Ile Pro Ala Val Asn Asp Leu Thr Ser Asp Leu Phe Arg Thr Lys  
 130 135 140  
 Ser Lys Ser Glu Glu Ile Lys Ile Glu Leu Glu Lys Leu Glu Lys Asn  
 145 150 155 160  
 Leu Thr Ala Thr Leu Val Leu Glu Lys Cys Leu Gln Glu Asp Val Lys  
 165 170 175  
 Lys Ala Glu Leu His Leu Ser Thr Glu Arg Ala Lys Val Asp Asn Arg  
 180 185 190  
 Arg Gln Asn Met Asp Phe Leu Lys Ala Lys Ser Glu Glu Phe Arg Phe  
 195 200 205  
 Gly Ile Lys Ala Ala Glu Glu Gln Leu Ser Ala Arg Gly Met Asp Ala  
 210 215 220  
 Ser Leu Ser His Gln Ser Leu Val Ala Leu Ser Glu Lys Leu Ala Arg  
 225 230 235 240  
 Leu Lys Gln Gln Thr Ile Pro Leu Lys Lys Lys Leu Glu Ser Tyr Leu  
 245 250 255  
 Asp Leu Met Pro Asn Pro Ser Leu Ala Gln Val Lys Ile Glu Glu Ala  
 260 265 270  
 Lys Arg Glu Leu Asp Ser Ile Glu Ala Glu Leu Thr Arg Arg Val Asp  
 275 280 285  
 Met Met Glu Leu  
 290

<210> 6173  
 <211> 1483  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 6173

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120  
caaggcctgt tgatgcagcc atgggcgtgg ctacagcttg cagagaactc cctcttggcc  
180  
aagggtttta tcaccaagca gggctatgcc ttgttggttt cagatcttca acagggtgtg  
240  
catgaacagg tggacactag tgtggtcagc cagcgagcca aggagctgaa caagcggctc  
300  
actgctcctc ctgcagcttt cctctgtcat ttggataatc tccttcgccc attgttgaag  
360  
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420  
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480  
gctagtccct ccctgggtctc ccaacatttg attcgtcctc tgatgggcat gagtctggca  
540  
ttacagtgcc aagtgcggga gctagcaacg ttacttcata tgaaagacct agagatccaa  
600  
gactaccagg agagtggggc tacgctgatt cgagatcgat tgaagacaga accatttgaa  
660  
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720  
gatggaaagc cctttgtcat gaatctgcag gatctgtata tggcagtcac cacacaagag  
780  
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840  
ctgcaaggaa tcgatagcca atgtgtaaac cagccagaac aactggctc ctcagcccca  
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960  
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1020  
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1080  
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1320  
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1380  
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1483

&lt;210&gt; 6174

<211> 299  
 <212> PRT  
 <213> Homo sapiens

<400> 6174

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      20           25           30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
      35           40           45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
      50           55           60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
65           70           75           80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
      85           90           95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
      100          105          110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
      115          120          125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
      130          135          140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
145          150          155          160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
      165          170          175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
      180          185          190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
      195          200          205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
      210          215          220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
225          230          235          240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
      245          250          255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
      260          265          270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
      275          280          285
Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
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<210> 6175  
 <211> 349  
 <212> DNA  
 <213> Homo sapiens

<400> 6175

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120

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aaaactgttc agtttggtgg aactgtgaca gaagtcttgc tgaagtacaa aaagggtgaa  
 180  
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 240  
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 300  
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 349

<210> 6176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6176

Met	Arg	Ala	Leu	Glu	Asn	Asp	Phe	Phe	Asn	Ser	Pro	Pro	Arg	Lys	Thr
1				5					10					15	
Val	Gln	Phe	Gly	Gly	Thr	Val	Thr	Glu	Val	Leu	Leu	Lys	Tyr	Lys	Lys
			20					25					30		
Gly	Glu	Thr	Asn	Asp	Phe	Glu	Leu	Leu	Lys	Asn	Gln	Leu	Leu	Asp	Pro
		35					40				45				
Asp	Ile	Lys	Arg	Leu	Pro	Trp	Leu	Asn	Arg	Ser	Gln	Thr	Val	Val	Glu
	50					55				60					
Glu	Tyr	Leu	Ala	Phe	Leu	Gly	Asn	Leu	Val	Ser	Ala	Gln	Thr	Val	Phe
65					70					75					80
Leu	Arg	Pro	Cys	Leu	Ser	Met	Ile	Ala	Ser						
			85						90						

<210> 6177

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 6177

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 120  
 ttctagcttt ctgtctctat gggtagctca gtggagtcac tgggcgaatg ggccatgctg  
 180  
 ttgcccagtg gaggttcca ggtgaaactc tatgacattg agcaacagca gataaggaac  
 240  
 gccctggaaa acatcagaaa ggagatgaag ttgctggagc aggcaggctc tctgaaaggc  
 300  
 tccttgagtg tggaagagca gctgtcactc atcagtgggt gtcccaatat ccaagaagca  
 360  
 gtagagggtg ccatgcacat tcaggaatgt gttccagaag atctagaact gaagaagaag  
 420  
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 480  
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 540  
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 600

gccctacga cagtggacag aacccacgcc ctgatgaaga agattgganc agtgcccat  
 660  
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 720  
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 780  
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 aatgcagaag gtatgttaag ctactgcgac agatacagcg aaggcataaa acatgtccta  
 900  
 cagacttttg gacccattcc agagttttcc agggccactg ctgagaaggt taaccaggac  
 960  
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 1020  
 gagtgcctca tgagactcgc caagttgaag agtcaagtgc agccccagtg aatttcttgt  
 1080  
 aatgcagctt ccaactcctc cattggaggc cctatttggg aacactgcaa gcccttaatc  
 1140  
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&lt;210&gt; 6178

&lt;211&gt; 310

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6178

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			20					25				30			
Arg	Asn	Ala	Leu	Glu	Asn	Ile	Arg	Lys	Glu	Met	Lys	Leu	Leu	Glu	Gln
			35				40					45			
Ala	Gly	Ser	Leu	Lys	Gly	Ser	Leu	Ser	Val	Glu	Glu	Gln	Leu	Ser	Leu
			50			55				60					
Ile	Ser	Gly	Cys	Pro	Asn	Ile	Gln	Glu	Ala	Val	Glu	Gly	Ala	Met	His
65					70			75						80	
Ile	Gln	Glu	Cys	Val	Pro	Glu	Asp	Leu	Glu	Leu	Lys	Lys	Lys	Ile	Phe
			85				90							95	
Ala	Gln	Leu	Asp	Ser	Ile	Ile	Asp	Asp	Arg	Val	Ile	Leu	Ser	Ser	Ser
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<210> 6179
<211> 2940
<212> DNA
<213> Homo sapiens
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660

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2280

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&lt;210&gt; 6180

&lt;211&gt; 751

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6180

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Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
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Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
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Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
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Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
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Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
145				150					155					160	
Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
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Gly	Thr	Asn	Leu	Val	Arg	Leu	Ser	Xaa	Ser	Trp	Arg	Cys	Lys	Cys	Gly
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Thr	Leu	Gln	Gln	Ile	Val	Leu	Thr	Gly	Ile	Leu	Glu	Gln	Val	Val	Asn



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Cys	Arg	Asp	Ala	Leu	Ala	Gln	Glu	Tyr	Leu	Met	Glu	Cys	Ile	Ile	Gln	
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Val	Phe	Pro	Asp	Glu	Phe	His	Leu	Gln	Thr	Leu	Asn	Pro	Phe	Leu	Arg	
225					230						235				240	
Ala	Cys	Ala	Glu	Leu	His	Gln	Asn	Val	Asn	Val	Lys	Asn	Ile	Ile	Ile	
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Ala	Leu	Ile	Asp	Arg	Leu	Ala	Leu	Phe	Ala	His	Arg	Glu	Asp	Gly	Pro	
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Gly	Ile	Pro	Ala	Asp	Ile	Lys	Leu	Phe	Asp	Ile	Phe	Ser	Gln	Gln	Val	
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Ala	Thr	Val	Ile	Gln	Ser	Arg	Gln	Asp	Met	Pro	Ser	Glu	Asp	Val	Val	
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Asn	Lys	Leu	Asn	Leu	Glu	His	Ile	Ala	Thr	Ser	Ser	Ala	Val	Ser	Lys	
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Glu	Leu	Thr	Arg	Leu	Leu	Lys	Ile	Pro	Val	Asp	Thr	Tyr	Asn	Asn	Ile	
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Asp	Tyr	Glu	Ser	Arg	Lys	Ser	Met	Ser	Cys	Tyr	Val	Leu	Ser	Asn	Val	
385					390						395				400	
Leu	Asp	Tyr	Asn	Thr	Glu	Ile	Val	Ser	Gln	Asp	Gln	Val	Asp	Ser	Ile	
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Glu	Asp	Pro	Asp	Pro	Glu	Asp	Phe	Ala	Asp	Glu	Gln	Ser	Leu	Val	Gly	
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Arg	Phe	Ile	His	Leu	Leu	Arg	Ser	Glu	Asp	Pro	Asp	Gln	Gln	Tyr	Leu	
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Phe	Arg	Tyr	Lys	Glu	Asn	Ser	Lys	Trp	Met	Thr	Asn	Gly	Lys	Arg	Asn	
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Ala	Arg	Arg	Phe	Phe	His	Leu	Pro	Xaa	Gln	Thr	Ile	Ser	Ala	Leu	Ile	
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Lys	Ala	Glu	Leu	Ala	Glu	Leu	Pro	Leu	Arg	Leu	Phe	Leu	Gln	Gly	Ala	
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Leu	Ala	Ala	Gly	Glu	Ile	Gly	Phe	Glu	Asn	His	Glu	Thr	Val	Ala	Tyr	
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Lys	Ala	Leu	Lys	Ile	Ala	Asn	Gln	Cys	Met	Asp	Pro	Ser	Leu	Gln	Val
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Gln	Leu	Phe	Ile	Glu	Ile	Leu	Asn	Arg	Tyr	Ile	Tyr	Phe	Tyr	Glu	Lys
675				680				685							
Glu	Asn	Asp	Ala	Val	Thr	Ile	Gln	Val	Leu	Asn	Gln	Leu	Ile	Gln	Lys
690				695				700							
Ile	Arg	Glu	Asp	Leu	Pro	Asn	Leu	Glu	Ser	Ser	Glu	Glu	Thr	Glu	Gln
705	710				715				720						
Ile	Asn	Lys	His	Phe	His	Asn	Thr	Leu	Glu	His	Leu	Arg'Leu	Arg	Arg	
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<212> DNA
<213> Homo sapiens
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 <212> PRT  
 <213> Homo sapiens

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 Glu Val Phe Phe Leu Pro Asp Leu Pro Thr Thr Pro Tyr Phe Ser Arg  
                   35                  40                  45  
 Asp Ala Gln Lys His Asp Val Glu Val Leu Glu Arg Asn Phe Gln Thr  
   50                  55                  60  
 Ile Leu Cys Glu Phe Glu Thr Leu Tyr Lys Ala Phe Ser Asn Cys Ser  
 65                  70                  75                  80  
 Leu Pro Gln Gly Trp Lys Met Asn Ser Thr Pro Ser Gly Glu Trp Phe  
                   85                  90                  95  
 Thr Phe Tyr Leu Val Asn Gln Gly Val Cys Val Pro Arg Asn Cys Arg  
                   100                  105                  110  
 Lys Cys Pro Arg Thr Tyr Arg Leu Leu Gly Ser Leu Arg Thr Cys Ile  
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 Gly Asn Asn Val Phe Gly Asn Ala Cys Ile Ser Val Leu Ser Pro Gly  
   130                  135                  140  
 Thr Val Ile Thr Glu His Tyr Gly Pro Thr Asn Ile Arg Ile Arg Cys  
 145                  150                  155                  160  
 His Leu Gly Leu Lys Thr Pro Asn Gly Cys Glu Leu Val Val Gly Gly  
                   165                  170                  175  
 Glu Pro Gln Cys Trp Ala Glu Gly Arg Cys Leu Leu Phe Asp Asp Ser  
                   180                  185                  190  
 Phe Leu His Ala Ala Phe His Glu Gly Ser Ala Glu Asp Gly Pro Arg  
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 Val Val Phe Met Val Asp Leu Trp His Pro Asn Val Ala Ala Ala Glu  
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 <212> DNA  
 <213> Homo sapiens

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 2530

<210> 6184  
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 <212> PRT  
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 35 40 45  
 Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly  
 50 55 60  
 Ala Arg Gly Gly Lys Ala Glu Asp Lys Glu Trp Met Pro Val Thr Lys  
 65 70 75 80  
 Leu Gly Arg Leu Val Lys Asp Met Lys Ile Lys Ser Leu Glu Glu Ile  
 85 90 95  
 Tyr Leu Phe Ser Leu Pro Ile Lys Glu Ser Glu Ile Ile Asp Phe Phe  
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 Leu Gly Ala Ser Leu Lys Asp Glu Val Leu Lys Ile Met Pro Val Gln  
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 Lys Gln Thr Arg Ala Gly Gln Arg Thr Arg Phe Lys Ala Phe Val Ala  
 130 135 140  
 Ile Gly Asp Tyr Asn Gly His Val Gly Leu Gly Val Lys Cys Ser Lys

145                                      150                                      155                                      160  
 Glu Val Ala Thr Ala Ile Arg Gly Ala Ile Ile Leu Ala Lys Leu Ser  
    165                                      170                                      175  
 Ile Val Pro Val Arg Arg Gly Tyr Trp Gly Asn Lys Ile Gly Lys Pro  
    180                                      185                                      190  
 His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val  
    195                                      200                                      205  
 Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val  
    210                                      215                                      220  
 Pro Lys Lys Leu Leu Met Met Ala Gly Ile Asp Asp Cys Tyr Thr Ser  
 225                                      230                                      235                                      240  
 Ala Arg Gly Cys Thr Ala Thr Leu Gly Asn Phe Ala Lys Ala Thr Phe  
    245                                      250                                      255  
 Asp Ala Ile Ser Lys Thr Tyr Ser Tyr Leu Thr Pro Asp Leu Trp Lys  
    260                                      265                                      270  
 Glu Thr Val Phe Thr Lys Ser Pro Tyr Gln Glu Phe Thr Asp His Leu  
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<210> 6185

<211> 1231

<212> DNA

<213> Homo sapiens

<400> 6185

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 Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser  
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 Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro  
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 <211> 909  
 <212> DNA  
 <213> Homo sapiens

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 909

&lt;210&gt; 6188

&lt;211&gt; 227

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6188

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			20					25					30		
Glu	Ala	Leu	Leu	Asp	Glu	Asp	Thr	Leu	Phe	Cys	Gln	Gly	Leu	Glu	Val
	35						40					45			
Phe	Tyr	Pro	Glu	Leu	Gly	Asn	Ile	Gly	Cys	Lys	Val	Val	Pro	Asp	Cys
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Asn	Asn	Tyr	Arg	Gln	Lys	Ile	Thr	Ser	Trp	Met	Glu	Pro	Ile	Val	Lys
65					70					75				80	
Phe	Pro	Gly	Ala	Val	Tyr	Gly	Ala	Thr	Tyr	Ile	Leu	Val	Met	Val	Asp
			85					90					95		
Pro	Asp	Ala	Pro	Ser	Arg	Ala	Glu	Pro	Arg	Gln	Arg	Phe	Trp	Arg	His
			100					105					110		
Trp	Leu	Val	Thr	Asp	Ile	Lys	Gly	Ala	Asp	Leu	Lys	Lys	Gly	Lys	Ile
	115					120						125			
Gln	Gly	Gln	Glu	Leu	Ser	Ala	Tyr	Gln	Ala	Pro	Ser	Pro	Pro	Ala	His
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Ser	Gly	Phe	His	Arg	Tyr	Gln	Phe	Phe	Val	Tyr	Leu	Gln	Glu	Gly	Lys
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<213> Homo sapiens
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1140

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2761

&lt;210&gt; 6190

&lt;211&gt; 576

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6190

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 35          40          45
Asn Asn Leu Asn Val Glu Glu Asn Ser Ser Gly Asp Gln Arg Arg Ala
 50          55          60
Pro Leu Ala Ala Gly Thr Trp Arg Ser Ala Pro Val Pro Val Thr Thr
 65          70          75          80
Gln Asn Pro Pro Gly Ala Pro Pro Asn Val Leu Trp Gln Thr Pro Leu
 85          90          95
Ala Trp Gln Asn Pro Ser Gly Trp Gln Asn Gln Thr Ala Arg Gln Thr
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Pro Pro Ala Arg Gln Ser Pro Pro Ala Arg Gln Thr Pro Pro Ala Trp
 115          120          125
Gln Thr Gln Asn Pro Val Ala Trp Gln Asn Pro Val Ile Trp Pro Asn
 130          135          140
Pro Val Ile Trp Gln Asn Pro Val Ile Trp Pro Asn Pro Ile Val Trp
 145          150          155          160
Pro Gly Pro Val Val Trp Pro Asn Pro Leu Ala Trp Gln Asn Pro Pro
 165          170          175
Gly Trp Gln Thr Pro Pro Gly Trp Gln Thr Pro Pro Gly Trp Gln Gly
 180          185          190
Pro Pro Asp Trp Gln Gly Pro Pro Asp Trp Pro Leu Pro Pro Asp Trp
 195          200          205
Pro Leu Pro Pro Asp Trp Pro Leu Pro Thr Asp Trp Pro Leu Pro Pro
 210          215          220
Asp Trp Ile Pro Ala Asp Trp Pro Ile Pro Pro Asp Trp Gln Asn Leu
 225          230          235          240
Arg Pro Ser Pro Asn Leu Arg Pro Ser Pro Asn Ser Arg Ala Ser Gln
 245          250          255
Asn Pro Gly Ala Ala Gln Pro Arg Asp Val Ala Leu Leu Gln Glu Arg
 260          265          270
Ala Asn Lys Leu Val Lys Tyr Leu Met Leu Lys Asp Tyr Thr Lys Val
 275          280          285
Pro Ile Lys Arg Ser Glu Met Leu Arg Asp Ile Ile Arg Glu Tyr Thr
 290          295          300
Asp Val Tyr Pro Glu Ile Ile Glu Arg Ala Cys Phe Val Leu Glu Lys
 305          310          315          320
Lys Phe Gly Ile Gln Leu Lys Glu Ile Asp Lys Glu Glu His Leu Tyr
 325          330          335
Ile Leu Ile Ser Thr Pro Glu Ser Leu Ala Gly Ile Leu Gly Thr Thr
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Lys Asp Thr Pro Lys Leu Gly Leu Leu Leu Val Ile Leu Gly Val Ile

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385              390              395              400
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      405              410              415
Tyr Arg Arg Val Pro Asn Ser Asn Pro Pro Glu Tyr Glu Phe Leu Trp
      420              425              430
Gly Leu Arg Ser Tyr His Glu Thr Ser Lys Met Lys Val Leu Arg Phe
      435              440              445
Ile Ala Glu Val Gln Lys Arg Asp Pro Arg Asp Trp Thr Ala Gln Phe
      450              455              460
Met Glu Ala Ala Asp Glu Ala Leu Asp Ala Leu Asp Ala Ala Ala Ala
465              470              475              480
Glu Ala Glu Ala Arg Ala Glu Ala Arg Thr Arg Met Gly Ile Gly Asp
      485              490              495
Glu Ala Val Ser Gly Pro Trp Ser Trp Asp Asp Ile Glu Phe Glu Leu
      500              505              510
Leu Thr Trp Asp Glu Glu Gly Asp Phe Gly Asp Pro Trp Ser Arg Ile
      515              520              525
Pro Phe Thr Phe Trp Ala Arg Tyr His Gln Asn Ala Arg Ser Arg Phe
      530              535              540
Pro Gln Thr Phe Ala Gly Pro Ile Ile Gly Pro Gly Gly Thr Ala Ser
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Ala Asn Phe Ala Ala Asn Phe Gly Ala Ile Gly Phe Phe Trp Val Glu
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&lt;210&gt; 6191

&lt;211&gt; 3021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6191

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 3021

<210> 6192  
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 <212> PRT  
 <213> Homo sapiens

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 Asp Asp Thr His Tyr Phe Val Met Thr Ala Lys Lys Gln Cys Leu Leu  
 35 40 45  
 Arg Leu Gly Val Leu Arg Gln Asp Trp Pro Asp Thr Asn Arg Leu Leu  
 50 55 60  
 Gly Ser Ala Asn Val Val Thr Glu Ala Leu Gln Arg Phe Thr Arg Ala  
 65 70 75 80  
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His	Val	Ser	Asp	Leu	Ser	Ser	Ser	Trp	Ala	Asp	Gly	Leu	Ala	Leu
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<212> DNA
<213> Homo sapiens
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5376



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&lt;210&gt; 6194

&lt;211&gt; 621

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6194

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Ile	Cys	Leu	Arg	Arg	Arg	Ala	Arg	Thr	Ala	Thr	Arg	Gly	Glu	Met	Met
			20					25					30		
Asn	Thr	His	Arg	Ala	Ile	Glu	Ser	Asn	Ser	Gln	Thr	Ser	Pro	Leu	Asn
		35					40					45			
Ala	Glu	Val	Val	Gln	Tyr	Ala	Lys	Glu	Val	Val	Asp	Phe	Ser	Ser	His
	50					55					60				
Tyr	Gly	Ser	Glu	Asn	Ser	Met	Ser	Tyr	Thr	Met	Trp	Asn	Leu	Ala	Gly
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Val	Pro	Asn	Val	Phe	Pro	Ser	Ser	Gly	Asp	Phe	Thr	Gln	Thr	Ala	Val
				85					90					95	
Phe	Arg	Thr	Tyr	Gly	Thr	Trp	Trp	Asp	Gln	Cys	Pro	Ser	Ala	Ser	Leu
			100					105					110		
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[illegible]



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6197

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&lt;210&gt; 6198

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6198

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Ser	Ser	Gln	His	His	Gly	Leu	Asn	Thr	His	Trp	Ala	Pro	Thr	Leu	Gly
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&lt;210&gt; 6199

&lt;211&gt; 1777

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6199

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&lt;210&gt; 6200

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6200

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Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
		35					40					45			
Val	Gly	Val	Pro	Xaa	Arg	Ser	Pro	His	Pro	Gln	Gly	Gly	Phe	Thr	His
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Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
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Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
				85				90					95		
Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
			100				105						110		
Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
		115					120					125			
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155

160

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<211> 604  
<212> DNA  
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gccg  
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<210> 6202  
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<212> PRT  
<213> Homo sapiens

<400> 6202  
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35 40 45  
Ala Gly Leu Arg Gly Cys Arg Glu Glu Phe Gly Gly Lys Gly Gln Pro  
50 55 60  
Gln Ser Leu Ser Cys Ala Ser Trp Glu Arg Gly Met Thr Gly Arg His  
65 70 75 80  
Thr Asn Val Ser Gln Gly Arg Trp Ala Trp Gly His Arg Ala Pro Arg  
85 90 95  
Gly Gly Ser Gly Glu Gly Glu Pro Ala Glu Glu Arg Pro Gly Arg Ala  
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Gly Asp His Ala Gly Ala Gln Gly Glu Arg Gln Asp

115

120

&lt;210&gt; 6203

&lt;211&gt; 3462

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6203

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&lt;210&gt; 6204

&lt;211&gt; 486

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6204

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			20					25					30		
Asp	Gly	His	Arg	Leu	Cys	Ser	Asp	Leu	Met	Asn	Cys	Leu	His	Glu	Arg
		35					40					45			
Ala	Arg	Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Thr	Glu	Trp	Ala	Arg
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Arg	Trp	Arg	Gln	Leu	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Val	Glu
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Lys	Ala	Trp	Met	Ala	Phe	Met	Ser	Glu	Ala	Glu	Arg	Val	Ser	Glu	Leu
			85						90					95	
His	Leu	Glu	Val	Lys	Ala	Ser	Leu	Met	Asn	Asp	Asp	Phe	Glu	Lys	Ile
			100					105					110		
Lys	Asn	Trp	Gln	Lys	Glu	Ala	Phe	His	Lys	Gln	Met	Met	Gly	Gly	Phe
		115						120					125		
Lys	Glu	Thr	Lys	Glu	Ala	Glu	Asp	Gly	Phe	Arg	Lys	Ala	Gln	Lys	Pro
	130					135						140			
Trp	Ala	Lys	Lys	Leu	Lys	Glu	Val	Glu	Ala	Ala	Lys	Lys	Ala	His	His
145				150						155				160	
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			165						170					175	
Lys	Ala	Asp	Pro	Ser	Leu	Asn	Pro	Glu	Gln	Leu	Lys	Lys	Leu	Gln	Asp
			180					185						190	
Lys	Ile	Glu	Lys	Cys	Lys	Gln	Asp	Val	Leu	Lys	Thr	Lys	Glu	Lys	Tyr
	195						200						205		
Glu	Lys	Ser	Leu	Lys	Glu	Leu	Asp	Gln	Gly	Thr	Pro	Gln	Tyr	Met	Glu
	210					215							220		
Asn	Met	Glu	Gln	Val	Phe	Glu	Gln	Cys	Gln	Gln	Phe	Glu	Glu	Lys	Arg
225				230							235			240	
Leu	Arg	Phe	Phe	Arg	Glu	Val	Leu	Leu	Glu	Val	Gln	Lys	His	Leu	Asp

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<210> 6205
<211> 926
<212> DNA
<213> Homo sapiens
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120
agccagaagt tgctgttcat ggaaacttcg gccaaactga accaccaggt gtcggaggtg
180
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240
ggggaagaca cccctgcct gggccatggc cagctctagg tggattctga ttcactgtca
300
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360
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420
gtgctgtgcc ctatccccac tgataccatc tgattccccg atgcctgtgc ctgttcacc
480
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 900  
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<210> 6206

<211> 92

<212> PRT

<213> Homo sapiens

<400> 6206

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			20					25				30			
Arg	Glu	Gly	Lys	Glu	Phe	Ala	Asp	Ser	Gln	Lys	Leu	Leu	Phe	Met	Glu
		35					40					45			
Thr	Ser	Ala	Lys	Leu	Asn	His	Gln	Val	Ser	Glu	Val	Phe	Asn	Thr	Val
	50					55					60				
Ala	Gln	Glu	Leu	Leu	Gln	Arg	Ser	Asp	Glu	Glu	Gly	Gln	Ala	Leu	Xaa
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Gly	Glu	Asp	Thr	Pro	Cys	Leu	Gly	His	Gly	Gln	Leu				
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<210> 6207

<211> 1384

<212> DNA

<213> Homo sapiens

<400> 6207

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 180  
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 240  
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 1384

&lt;210&gt; 6208

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6208

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			20					25					30		
Ser	Ala	Gly	Leu	Ser	Leu	Val	Gly	Leu	Leu	Thr	Leu	Gly	Ala	Val	Leu
		35					40					45			
Ser	Ala	Ala	Ala	Thr	Val	Arg	Glu	Ala	Gln	Gly	Leu	Met	Ala	Gly	Gly
		50				55					60				
Phe	Leu	Cys	Phe	Ser	Leu	Ala	Phe	Xaa	Ala	Gln	Val	Gln	Val	Val	Phe
65					70					75				80	
Trp	Arg	Leu	His	Ser	Pro	Thr	Gln	Val	Glu	Asp	Ala	Met	Leu	Asp	Thr

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<400> 6209
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<210> 6210

<211> 165

<212> PRT

<213> Homo sapiens

<400> 6210

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		20						25					30		
Ser	Pro	Ser	Leu	Arg	Gly	Thr	His	Leu	Leu	Phe	Leu	Pro	Gln	Ala	Asp
		35					40					45			
Val	Val	Asp	Glu	Ala	Ile	Asp	Ser	Leu	Ala	Arg	Thr	Lys	Gly	Val	Met
	50					55					60				
Lys	Pro	Pro	Cys	Ser	Glu	Gly	Ser	Pro	Trp	Arg	Cys	Pro	His	Phe	Thr
65					70				75					80	
Cys	Trp	Val	Leu	Gln	Ala	Arg	Lys	Pro	Gly	Ser	Gly	Gly	Thr	Arg	Glu
			85						90					95	
Arg	Gln	Ala	Cys	Val	Trp	Thr	Ser	Ala	Gly	Ala	Ala	Ala	Leu	Arg	Leu
		100						105					110		
Ala	Arg	Glu	Arg	Gln	Arg	Trp	Val	Phe	Arg	Phe	His	Ala	Tyr	Val	Trp
	115					120					125				
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	130					135					140				
Pro	Glu	Gln	Gln	Trp	Thr	Asp	Glu	Ile	Arg	Leu	Phe	Gln	Lys	Gln	Arg
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Trp	Pro	Gln	Pro	Ser											
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<210> 6211

<211> 2163

<212> DNA

<213> Homo sapiens

<400> 6211

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 <213> Homo sapiens

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&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6214

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Lys	Gly	Val	Met	Glu	Gly	Gln	Ser	Leu	Glu	Pro	Ala	Ala	Ser	Ser	Gly
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 <213> Homo sapiens

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 Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala  
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<400> 6217

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&lt;210&gt; 6218

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6218

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Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr			
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&lt;210&gt; 6219

&lt;211&gt; 2495

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6219

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&lt;210&gt; 6222

&lt;211&gt; 330

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6222

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			20					25					30		
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		50				55					60				
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65					70					75				80	
Asp	Glu	Asp	Gly	Lys	Pro	Phe	Asn	Gln	Arg	Ser	Leu	Leu	Leu	Gly	His
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<213> Homo sapiens
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 <213> Homo sapiens

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 Ala Glu Gly His Val Gly Gln Gly Ala Pro Gly Leu Met Gly Asn Met  
 35 40 45  
 Asn Pro Glu Gly Gly Val Asn His Glu Asn Gly Met Asn Arg Asp Gly  
 50 55 60  
 Gly Met Ile Pro Glu Gly Gly Gly Gly Asn Gln Glu Pro Arg Gln Gln  
 65 70 75 80  
 Pro Gln Pro Pro Pro Glu Glu Pro Ala Gln Ala Ala Met Glu Gly Pro  
 85 90 95  
 Gln Pro Glu Asn Met Gln Pro Arg Thr Arg Arg Thr Lys Phe Thr Leu  
 100 105 110  
 Leu Gln Val Glu Glu Leu Glu Ser Val Phe Arg His Thr Gln Tyr Pro  
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 Asp Val Pro Thr Arg Arg Glu Leu Ala Glu Asn Leu Gly Val Thr Glu  
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 Asp Lys Val Arg Val Ser Thr Leu Glu Lys Ala Ile  
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<210> 6225  
 <211> 3851  
 <212> DNA  
 <213> Homo sapiens

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<211> 246

<212> PRT

<213> Homo sapiens

<400> 6226

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Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
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Lys	Gln	Ser	Val	Asn	Arg	Gly	Phe	Thr	Lys	Asp	Lys	Thr	Leu	Ser	Ser
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Ile	Phe	Asn	Ile	Glu	Met	Val	Lys	Glu	Lys	Thr	Ala	Glu	Glu	Ile	Lys
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Gln	Ile	Trp	Gln	Gln	Tyr	Phe	Ala	Ala	Lys	Asp	Thr	Val	Tyr	Ala	Val
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Ile	Pro	Ala	Glu	Lys	Phe	Asp	Leu	Ile	Trp	Asn	Arg	Ala	Gln	Ser	Cys
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		115					120					125			
Val	Gly	Gln	Trp	Thr	Gly	Thr	Glu	Leu	His	Phe	Thr	Ala	Leu	Ile	Asn
	130				135					140					
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Gln	Val	Gln	Leu	Phe	Tyr	Ala	Thr	Asp	Arg	Lys	Glu	Thr	Tyr	Gly	Leu
		195					200					205			
Val	Glu	Thr	Phe	Asn	Leu	Arg	Pro	Asn	Glu	Phe	Lys	Tyr	Met	Ser	Val
	210				215						220				
Ile	Ala	Glu	Leu	Glu	Gln	Ser	Gly	Leu	Gly	Ala	Glu	Leu	Lys	Cys	Ala
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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn  
 50 55 60  
 Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu Gly Phe  
 65 70 75 80  
 Leu Arg Glu Phe Gly Arg Leu Cys Ser Glu Met Leu Lys Thr Ser Val

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			100						105						110																													
Gln	Phe	Pro	Val	Met	Thr	Glu	Ala	Ile	Thr	Gln	Ile	Arg	Ala	Lys	Gly																													
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Leu	Gln	Thr	Ala	Val	Leu	Ser	Asn	Asn	Phe	Tyr	Leu	Pro	Asn	Gln	Lys																													
			130						135						140																													
Ser	Phe	Leu	Pro	Leu	Asp	Arg	Lys	Gln	Phe	Asp	Val	Ile	Val	Glu	Ser																													
			145						150						155																													
Cys	Met	Glu	Gly	Ile	Cys	Lys	Pro	Asp	Pro	Arg	Ile	Tyr	Lys	Leu	Cys																													
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Leu	Glu	Gln	Leu	Gly	Leu	Gln	Pro	Ser	Glu	Ser	Ile	Phe	Leu	Asp	Asp																													
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Lys	Val	Asn	Asp	Pro	Glu	Thr	Ala	Val	Lys	Glu	Leu	Glu	Ala	Leu	Leu																													
			210						215						220																													
Gly	Phe	Thr	Leu	Arg	Val	Gly	Val	Pro	Asn	Thr	Arg	Pro	Val	Lys	Lys																													
			225						230						235																													
Thr	Met	Glu	Ile	Pro	Lys	Asp	Ser	Leu	Gln	Lys	Tyr	Leu	Lys	Asp	Leu																													
			245						250						255																													
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<212> DNA
<213> Homo sapiens
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2340

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&lt;210&gt; 6230

&lt;211&gt; 944

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6230

Met	Ala	Leu	Leu	Gly	Lys	Arg	Cys	Asp	Val	Pro	Thr	Asn	Gly	Cys	Gly
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Pro	Asp	Arg	Trp	Asn	Ser	Ala	Phe	Thr	Arg	Lys	Asp	Glu	Ile	Ile	Thr
			20					25					30		
Ser	Leu	Val	Ser	Ala	Leu	Asp	Ser	Met	Cys	Ser	Ala	Leu	Ser	Lys	Leu
		35				40					45				
Asn	Ala	Glu	Val	Ala	Cys	Val	Ala	Val	His	Asp	Glu	Ser	Ala	Phe	Val
	50				55					60					
Val	Gly	Thr	Glu	Lys	Gly	Arg	Met	Phe	Leu	Asn	Ala	Arg	Lys	Glu	Leu
65				70					75					80	
Gln	Ser	Asp	Phe	Leu	Arg	Phe	Cys	Arg	Gly	Pro	Pro	Trp	Lys	Asp	Pro
			85						90					95	
Glu	Ala	Glu	His	Pro	Lys	Lys	Val	Gln	Arg	Gly	Glu	Gly	Gly	Gly	Arg
			100					105						110	
Ser	Leu	Pro	Arg	Ser	Ser	Leu	Glu	His	Gly	Ser	Asp	Val	Tyr	Leu	Leu
		115				120					125				
Arg	Lys	Met	Val	Glu	Glu	Val	Phe	Asp	Val	Leu	Tyr	Ser	Glu	Ala	Leu
	130					135				140					
Gly	Arg	Ala	Ser	Val	Val	Pro	Leu	Pro	Tyr	Glu	Arg	Leu	Leu	Arg	Glu
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5414

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<211> 471
<212> DNA
<213> Homo sapiens
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120
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 240  
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 360  
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<210> 6232

<211> 138

<212> PRT

<213> Homo sapiens

<400> 6232

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Gly	Asp	Arg	Thr	Arg	Pro	Cys	Leu	Phe	Lys	Lys	Lys	Lys	Lys	Ala	Gln
			20					25					30		
Lys	Lys	Ser	Met	Leu	Gly	Gln	Lys	Ser	Gly	Pro	Ser	Gly	Leu	Leu	Thr
		35				40						45			
Trp	Arg	Arg	Lys	Arg	Gly	Pro	Lys	Pro	Pro	Val	Ala	Pro	Ile	Ser	Ile
	50				55					60					
Trp	Asn	Gly	Thr	Thr	Pro	Arg	Gly	Glu	Pro	Pro	Asn	His	Ser	Ser	
65					70				75					80	
Lys	Lys	Gly	Thr	Lys	Lys	Trp	Ala	Leu	Asp	Phe	Ser	Thr	Pro	Glu	Thr
			85						90					95	
Gln	Phe	Pro	Pro	Pro	Gly	Arg	Pro	Phe	Leu	Gly	Ile	Pro	Thr	Trp	Asp
		100						105					110		
Pro	Thr	Trp	Ala	Tyr	Ser	Gly	Pro	Tyr	Leu	Phe	Leu	Val	Gly	Ile	Gly
		115				120						125			
Ile	Pro	Phe	Pro	Phe	Pro	Pro	Pro	Ser	Asn						
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<210> 6233

<211> 894

<212> DNA

<213> Homo sapiens

<400> 6233

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 240  
 gccatctgcc cccatcgacc ggtactggac accctggcca tgctgactgc ccaccgtgca  
 300



ggcaagaaac atctgtccag cttgcagctt ttctatggca agaagcagcc gggaaaggaa  
 360  
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 420  
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 480  
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&lt;210&gt; 6234

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6234

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Lys	Lys	Arg	Arg	Val	Gly	Asp	Leu	Leu	Ala	Ser	Tyr	Ile	Pro	Glu	Asp
			20					25					30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
		35				40					45				
His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
	50				55						60				
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
65			70					75						80	
Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
			85					90					95		
Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
			100					105					110		
Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
		115				120						125			
Arg	Arg	Lys	Tyr	Arg	Pro	Glu	Ala	Pro	Gly	Pro	Ser	Val	Ser	Leu	Ser
		130				135					140				
Pro	Met	Pro	Pro	Ser	Glu	Val	Lys	Leu	Gln	Ser	Gly	Lys	Ile	Ser	Arg
145				150					155					160	
Glu	Pro	Glu	Pro	Ala	Ala	Gly	Pro	Gln	Ala	Glu	Glu	Ser	Ala	Thr	Val
			165					170						175	
Ser	Ala	Pro	Ala	Pro	Met	Ser	Pro	Thr	Arg	Arg	Arg	Ala	Leu	Asp	His
			180					185					190		
Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
		195				200					205				
Trp	Val	Lys	Asp	Glu	Asn	Val	Glu	Phe	Asp	Ser	Asp	Glu	Glu	Glu	Pro

210  
Pro Asp Leu Pro Leu Asp  
225 230

220

&lt;210&gt; 6235

&lt;211&gt; 3427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6235

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120  
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240  
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<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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			20					25					30		
Pro	Glu	Gly	Gly	Leu	Pro	Gly	Pro	Trp	Ala	Leu	His	Arg	Gly	Arg	Lys
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Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
	50					55					60				
Gly	Ala	Glu	Glu	Gln	Thr	Gln	Val	Ala	Lys	Ala	Ala	Phe	Lys	Arg	Phe
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Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
			85					90					95		
Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
		100						105					110		
Ile	Tyr	Leu	Lys	Ala	Arg	Val	Glu	Ala	Gly	Gly	Leu	Lys	Glu	Leu	Glu
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Ile	Ser	Trp	Gly	Leu	His	Gln	Ile	Val	Lys	Ala	Leu	Ser	Phe	Leu	Val
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Val	Asp	Arg	Ala	Gly	Glu	Trp	Lys	Leu	Gly	Gly	Leu	Asp	Tyr	Met	Tyr
		165						170					175		
Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
	180							185					190		
Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
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Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly	Cys	Leu	Ile
	210				215						220				
Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala	Leu	Arg	Asn

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Pro	Gly	Lys	Ile	Pro	Lys	Thr	Leu	Val	Pro	His	Tyr	Cys	Glu	Leu	Val
				245					250					255	
Gly	Ala	Asn	Pro	Lys	Val	Arg	Pro	Asn	Pro	Ala	Arg	Phe	Leu	Gln	Asn
			260					265					270		
Cys	Arg	Ala	Pro	Gly	Gly	Phe	Met	Ser	Asn	Arg	Phe	Val	Glu	Thr	Asn
	275						280					285			
Leu	Phe	Leu	Glu	Glu	Ile	Gln	Ile	Lys	Glu	Pro	Ala	Glu	Lys	Gln	Lys
	290					295					300				
Phe	Phe	Gln	Glu	Leu	Ser	Lys	Ser	Leu	Asp	Ala	Phe	Pro	Glu	Asp	Phe
305					310					315					320
Cys	Arg	His	Lys	Val	Leu	Pro	Gln	Leu	Leu	Thr	Ala	Phe	Glu	Phe	Gly
			325						330					335	
Asn	Ala	Gly	Ala	Val	Val	Leu	Thr	Pro	Leu	Phe	Lys	Val	Gly	Lys	Phe
		340						345					350		
Leu	Ser	Ala	Glu	Glu	Tyr	Gln	Gln	Lys	Ile	Ile	Pro	Val	Val	Val	Lys
	355						360					365			
Met	Phe	Ser	Ser	Thr	Asp	Arg	Ala	Met	Arg	Ile	Arg	Leu	Leu	Gln	Gln
	370				375						380				
Met	Glu	Gln	Phe	Ile	Gln	Tyr	Leu	Asp	Glu	Pro	Thr	Val	Asn	Thr	Gln
385					390					395					400
Ile	Phe	Pro	His	Val	Val	His	Gly	Phe	Leu	Asp	Thr	Asn	Pro	Ala	Ile
			405						410					415	
Arg	Glu	Gln	Thr	Val	Lys	Ser	Met	Leu	Leu	Leu	Ala	Pro	Lys	Leu	Asn
			420					425					430		
Glu	Ala	Asn	Leu	Asn	Val	Glu	Leu	Met	Lys	His	Phe	Ala	Arg	Leu	Gln
		435					440					445			
Ala	Lys	Asp	Glu	Gln	Gly	Pro	Ile	Arg	Cys	Asn	Thr	Thr	Val	Cys	Leu
	450					455					460				
Gly	Lys	Ile	Gly	Ser	Tyr	Leu	Ser	Ala	Ser	Thr	Arg	His	Arg	Val	Leu
465					470					475					480
Thr	Ser	Ala	Phe	Ser	Arg	Ala	Thr	Arg	Asp	Pro	Phe	Ala	Pro	Ser	Arg
			485						490					495	
Val	Ala	Gly	Val	Leu	Gly	Phe	Ala	Ala	Thr	His	Asn	Leu	Tyr	Ser	Met
		500						505					510		
Asn	Asp	Cys	Ala	Gln	Lys	Ile	Leu	Pro	Val	Leu	Cys	Gly	Leu	Thr	Val
	515						520					525			
Asp	Pro	Glu	Lys	Ser	Val	Arg	Asp	Gln	Ala	Phe	Lys	Ala	Ile	Arg	Ser
	530					535					540				
Phe	Leu	Ser	Lys	Leu	Glu	Ser	Val	Ser	Glu	Asp	Pro	Thr	Gln	Leu	Glu
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Glu	Val	Glu	Lys	Asp	Val	His	Ala	Ala	Ser	Ser	Pro	Gly	Met	Gly	Gly
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Ala	Ala	Ala	Ser	Trp	Ala	Gly	Trp	Ala	Val	Thr	Gly	Val	Ser	Ser	Leu
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Thr	Ser	Lys	Leu	Ile	Arg	Ser	His	Pro	Thr	Thr	Ala	Pro	Thr	Glu	Thr
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Asn	Ile	Pro	Gln	Arg	Pro	Thr	Pro	Glu	Gly	Val	Pro	Ala	Pro	Ala	Pro
	610					615					620				
Thr	Pro	Val	Pro	Ala	Thr	Pro	Thr	Thr	Ser	Gly	His	Trp	Glu	Thr	Gln
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Glu	Glu	Asp	Lys	Asp	Thr	Ala	Glu	Asp	Ser	Ser	Thr	Ala	Asp	Arg	Trp
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Asp	Asp	Glu	Asp	Trp	Gly	Ser	Leu	Glu	Gln	Glu	Ala	Glu	Ser	Val	Leu

<400> 6238  
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Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met			
	35	40	45
Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala			
	50	55	60
Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly			
65		70	75
His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg			
	85	90	95
His Gly Asp Arg Tyr Pro Leu Tyr Val Ile Pro Lys Thr Lys Arg Pro			
	100	105	110
Glu Ile Asp Cys Thr Leu Val Ala Asn Arg Lys Pro Tyr His Pro Lys			
	115	120	125
Leu Glu Ala Phe Ile Ser His Met Leu Arg Gly Ser Gly			
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&lt;210&gt; 6239

&lt;211&gt; 911

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6239

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<212> PRT  
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Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe  
50 55 60  
Gly Pro Leu Gly Phe Ser Phe Phe Phe Asn Met Leu Phe Val Phe Arg  
65 70 75 80  
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85 90 95  
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115 120 125  
Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn Phe Phe  
130 135 140  
Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly  
145 150 155 160  
Phe Ser Leu Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile  
165 170 175  
Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln  
180 185 190  
Pro Gly Gly Lys Arg Leu Leu Gln Thr Pro Gly Phe Leu Lys Leu Leu  
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<213> Homo sapiens

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&lt;210&gt; 6242

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6242

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Gly Glu Pro Pro Pro Pro Glu Leu Ala Leu Leu Pro Pro Pro Pro Pro
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Pro Pro Pro Thr Pro Ala Thr Pro Thr Ser Ser Ala Ser Asn Leu Asp
65      70      75      80
Leu Gly Glu Gln Arg Asp Ala Trp Glu Thr Phe Gln Lys Arg Gln Lys
      85      90      95
Leu Thr Ser Glu Gly Ala Ala Lys Leu Leu Leu Asp Thr Phe Glu Tyr
      100      105      110
Gln Gly Leu Val Lys His Thr Gly Gly Cys His Cys Gly Ala Val Arg
      115      120      125
Phe Glu Val Trp Ala Ser Ala Asp Leu His Ile Phe Asp Cys Asn Cys
      130      135      140
Ser Ile Cys Lys Lys Lys Gln Asn Arg His Phe Ile Val Pro Ala Ser
145      150      155      160
Arg Phe Lys Leu Leu Lys Gly Ala Glu His Ile Thr Thr Tyr Thr Phe
      165      170      175
Asn Thr His Lys Ala Gln His Thr Phe Cys Lys Arg Cys Gly Val Gln
      180      185      190
Ser Phe Tyr Thr Pro Arg Ser Asn Pro Gly Gly Phe Gly Ile Ala Pro
      195      200      205
His Cys Leu Asp Glu Gly Thr Val Arg Ser Met Val Thr Glu Glu Phe
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Asn Gly Ser Asp Trp Glu Lys Ala Met Lys Glu His Lys Thr Ile Lys
225      230      235      240
Asn Met Ser Lys Glu
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&lt;210&gt; 6243

&lt;211&gt; 326

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6243

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326

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&lt;210&gt; 6244

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6244

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Gly Phe Leu Leu Trp Lys Ala Ile Pro Ser Phe Ala Ser Ser Thr Leu
          35           40           45
Arg Met Ser Ser Ser Leu His Ser Leu Trp Phe Val Pro Leu Val Ser
          50           55           60
Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys
65           70           75           80
Pro Tyr Val Leu Ser Tyr Pro Thr Ser Ser Leu Thr Leu Phe His Gln
          85           90           95
Phe Leu Ser Phe Ser Pro Trp Arg
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&lt;210&gt; 6245

&lt;211&gt; 6609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6245

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960

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<210> 6246  
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 35 40 45  
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 85 90 95  
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 115 120 125  
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Glu	Glu	Glu	Ile	Gln	Ala	Leu	Thr	Ala	His	Arg	Asp	Glu	Ile	Gln	Arg
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Lys	Phe	Asp	Ala	Leu	Arg	Asn	Ser	Cys	Thr	Val	Ile	Thr	Asp	Leu	Glu
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Glu	Gln	Leu	Asn	Gln	Leu	Thr	Glu	Asp	Asn	Ala	Glu	Leu	Asn	Asn	Gln
225				230						235					240
Asn	Phe	Tyr	Leu	Ser	Lys	Gln	Leu	Asp	Glu	Ala	Ser	Gly	Ala	Asn	Asp
			245					250						255	
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Thr	Glu	Arg	Glu	Met	Gln	Leu	Thr	Ser	Gln	Lys	Gln	Thr	Met	Glu	Ala
		275					280						285		
Leu	Lys	Thr	Thr	Cys	Thr	Met	Leu	Glu	Glu	Gln	Val	Met	Asp	Leu	Glu
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Ala	Leu	Asn	Asp	Glu	Leu	Leu	Glu	Lys	Glu	Arg	Gln	Trp	Glu	Ala	Trp
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Arg	Ser	Val	Leu	Gly	Asp	Glu	Lys	Ser	Gln	Phe	Glu	Cys	Arg	Val	Arg
			325						330					335	
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			340					345						350	
Asp	Gln	Arg	Ile	Thr	Glu	Ser	Arg	Gln	Val	Val	Glu	Leu	Ala	Val	Lys
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Glu	His	Lys	Ala	Glu	Ile	Leu	Ala	Leu	Gln	Gln	Ala	Leu	Lys	Glu	Gln
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Lys	Leu	Lys	Ala	Glu	Ser	Leu	Ser	Asp	Lys	Leu	Asn	Asp	Leu	Glu	Lys
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Lys	His	Ala	Met	Leu	Glu	Met	Asn	Ala	Arg	Ser	Leu	Gln	Gln	Lys	Leu
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Glu	Thr	Glu	Arg	Glu	Leu	Lys	Gln	Arg	Leu	Leu	Glu	Glu	Gln	Ala	Lys
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Leu	Gln	Gln	Gln	Met	Asp	Leu	Gln	Lys	Asn	His	Ile	Phe	Arg	Leu	Thr
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Gln	Gly	Leu	Gln	Glu	Ala	Leu	Asp	Arg	Ala	Asp	Leu	Leu	Lys	Thr	Glu
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Arg	Ser	Asp	Leu	Glu	Tyr	Gln	Leu	Glu	Asn	Ile	Gln	Val	Leu	Tyr	Ser
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His	Glu	Lys	Val	Lys	Met	Glu	Gly	Thr	Ile	Ser	Gln	Gln	Thr	Lys	Leu
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Ile	Asp	Phe	Leu	Gln	Ala	Lys	Met	Asp	Gln	Pro	Ala	Lys	Lys	Lys	Lys
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Val	Pro	Leu	Gln	Tyr	Asn	Glu	Leu	Lys	Leu	Ala	Leu	Glu	Lys	Glu	Lys
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Pro	His	Pro	Ser	Thr	Pro	Ala	Thr	Ala	Arg	Gln	Gln	Ile	Ala	Met	Ser
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Ala	Ile	Val	Arg	Ser	Pro	Glu	His	Gln	Pro	Ser	Ala	Met	Ser	Leu	Leu



			580				585				590					
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			595				600				605					
Ser	Arg	Arg	Leu	Lys	Glu	Arg	Met	His	His	Asn	Ile	Pro	His	Arg	Phe	
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Pro	Ala	Glu	Tyr	Ala	Thr	His	Phe	Thr	Glu	Ala	Phe	Cys	Arg	Asp	Lys	
			675				680				685					
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Tyr	Asp	Asn	Glu	Ala	Arg	Glu	Ala	Gly	Gln	Arg	Pro	Val	Glu	Glu	Phe	
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			755				760				765					
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His	Leu	Pro	Ala	Gln	Pro	Asp	Ile	Ser	Pro	Asn	Ile	Phe	Glu	Ala	Val	
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Lys	Gly	Cys	His	Leu	Phe	Gly	Ala	Gly	Lys	Ile	Glu	Asn	Gly	Leu	Cys	
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			980				985				990					
Cys	Ser	Cys	Ile	His	Phe	Thr	Asn	Tyr	Ser	Ile	Leu	Ile	Gly	Thr	Asn	
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Asn Ser Phe Pro Val Ser Ile Val Gln Val Asn Ser Ala Gly Gln Arg
      1045              1050              1055
Glu Glu Tyr Leu Leu Cys Phe His Glu Phe Gly Val Phe Val Asp Ser
      1060              1065              1070
Tyr Gly Arg Arg Ser Arg Thr Asp Asp Leu Lys Trp Ser Arg Leu Pro
      1075              1080              1085
Leu Ala Phe Ala Tyr Arg Glu Pro Tyr Leu Phe Val Thr His Phe Asn
      1090              1095              1100
Ser Leu Glu Val Ile Glu Ile Gln Ala Arg Ser Ser Ala Gly Thr Pro
1105              1110              1115              1120
Ala Arg Ala Tyr Leu Asp Ile Pro Asn Pro Arg Tyr Leu Gly Pro Ala
      1125              1130              1135
Ile Ser Ser Gly Ala Ile Tyr Leu Ala Ser Ser Tyr Gln Asp Lys Leu
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      1170              1175              1180
Pro Pro Thr Tyr Asn Glu His Ile Thr Lys Arg Val Ala Ser Ser Pro
1185              1190              1195              1200
Ala Pro Pro Glu Gly Pro Ser His Pro Arg Glu Pro Ser Thr Pro His
      1205              1210              1215
Arg Tyr Arg Glu Gly Arg Thr Glu Leu Arg Arg Asp Lys Ser Pro Gly
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Arg Pro Leu Glu Arg Glu Lys Ser Pro Gly Arg Met Leu Ser Thr Arg
      1235              1240              1245
Arg Glu Arg Ser Pro Gly Arg Leu Phe Glu Asp Ser Ser Arg Gly Arg
      1250              1255              1260
Leu Pro Ala Gly Ala Val Arg Thr Pro Leu Ser Gln Val Asn Lys Val
1265              1270              1275              1280
Trp Asp Gln Ser Ser Val
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&lt;210&gt; 6247

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6247

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gccgcagcg cggtctcccg ggagagaaat attattcatc tgtgccagag gaaggagggg
240
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 <212> PRT  
 <213> Homo sapiens

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 Arg Glu Thr Ala Gly Ser Arg Pro Ala Ala Arg Ser Pro Gly Arg Glu  
 50 55 60  
 Ile Leu Phe Ile Cys Ala Arg Gly Arg Arg Gly Asn Pro Cys Leu Ser  
 65 70 75 80  
 Leu Ser Gln Arg Arg Val Glu Ala Ala His Val Leu Gly His Arg Glu  
 85 90 95  
 Trp Ser Glu Lys Arg Gln Lys Lys Asp Ile Pro Trp Ser Trp Arg Gln  
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<210> 6249  
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 <212> DNA  
 <213> Homo sapiens

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 720  
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 780  
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<210> 6250  
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 <213> Homo sapiens

<400> 6250  
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 35 40 45  
 Tyr Pro Gly Ile Gln Thr Arg Val Leu Asp Val Thr Lys Lys Lys Gln  
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 Ile Asp Gln Phe Ala Asn Glu Val Glu Arg Leu Asp Val Leu Phe Asn  
 65 70 75 80  
 Val Ala Gly Phe Val His His Gly Thr Val Leu Asp Cys Glu Glu Lys  
 85 90 95  
 Asp Trp Asp Phe Ser Met Asn Leu Asn Val Arg Ser Met Tyr Leu Met  
 100 105 110  
 Ile Lys Ala Phe Leu Pro Lys Met Leu Ala Gln Lys Ser Gly Asn Ile  
 115 120 125  
 Ile Asn Met Ser Ser Val Ala Ser Ser Val Lys Gly Val Val Asn Arg  
 130 135 140  
 Cys Val Tyr Ser Thr Thr Lys Ala Ala Val Ile Gly Leu Thr Lys Ser  
 145 150 155 160  
 Val Ala Ala Asp Phe Ile Gln Gln Gly Ile Arg Cys Asn Cys Val Cys

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Gly	Asn	Pro	Glu	Glu	Ala	Arg	Asn	Asp	Phe	Leu	Lys	Arg	Gln	Lys	Thr				
		195					200					205							
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	210					215					220								
Ala	Ser	Asp	Glu	Ser	Ala	Tyr	Val	Thr	Gly	Asn	Pro	Val	Ile	Ile	Asp				
225					230					235					240				
Gly	Gly	Trp	Ser	Leu															
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&lt;210&gt; 6251

&lt;211&gt; 1611

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6251

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&lt;210&gt; 6252

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6252

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Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
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Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
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Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
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Pro	Thr	Ile	Pro												
			100												

&lt;210&gt; 6253

&lt;211&gt; 1953

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6253

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 1953

<210> 6254  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<400> 6254  
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 Glu Ala Thr Leu Gly Ser Gly Asn Leu Arg Gln Ala Val Met Leu Pro  
 35 40 45  
 Glu Gly Glu Asp Leu Asn Glu Trp Ile Ala Val Asn Thr Val Asp Phe  
 50 55 60  
 Phe Asn Gln Ile Asn Met Leu Tyr Gly Thr Ile Thr Glu Phe Cys Thr  
 65 70 75 80  
 Glu Ala Ser Cys Pro Val Met Ser Ala Gly Pro Arg Tyr Glu Tyr His  
 85 90 95  
 Trp Ala Asp Gly Thr Asn Ile Lys Lys Pro Ile Lys Cys Ser Ala Pro  
 100 105 110  
 Lys Tyr Ile Asp Tyr Leu Met Thr Trp Val Gln Asp Gln Leu Asp Asp  
 115 120 125  
 Glu Thr Leu Phe Pro Ser Lys Ile Gly Val Pro Phe Pro Lys Asn Phe  
 130 135 140  
 Met Ser Val Ala Lys Thr Ile Leu Lys Arg Leu Phe Arg Val Tyr Ala  
 145 150 155 160  
 His Ile Tyr His Gln His Phe Asp Ser Val Met Gln Leu Gln Glu Glu  
 165 170 175  
 Ala His Leu Asn Thr Ser Phe Lys His Phe Ile Phe Phe Val Gln Glu  
 180 185 190  
 Phe Asn Leu Ile Asp Arg Arg Glu Leu Ala Pro Leu Gln Glu Leu Ile  
 195 200 205  
 Glu Lys Leu Gly Ser Lys Asp Arg  
 210 215

<210> 6255  
 <211> 622  
 <212> DNA  
 <213> Homo sapiens

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 120  
 aaagccacag tggtgcctt cacagccagc gagggccacg cacatcccag ggtagtggag  
 180  
 ctaccaaga cggatgaggg cctaggcttc aacatcatgg gtggcaaaga gcaaaactcg  
 240



cccatctaca tctcccggtt catcccaggg ggtgtggctg accgccatgg aggcctcaag  
 300  
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 360  
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 420  
 cgagtgtctg aggagatgga ggcccgggtc gagaagatgc gctctgcccg ccggcgccaa  
 480  
 cagcatcaga gctactcgtc cttggagtct cgaggttgaa accacagatc tggacgttca  
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 622

<210> 6256  
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 <212> PRT  
 <213> Homo sapiens

<400> 6256  
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 35 40 45  
 Asn Ile Met Gly Gly Lys Glu Gln Asn Ser Pro Ile Tyr Ile Ser Arg  
 50 55 60  
 Val Ile Pro Gly Gly Val Ala Asp Arg His Gly Gly Leu Lys Arg Gly  
 65 70 75 80  
 Asp Gln Leu Leu Ser Val Asn Gly Val Ser Val Glu Gly Glu Gln His  
 85 90 95  
 Glu Lys Ala Val Glu Leu Leu Lys Ala Ala Gln Gly Ser Val Lys Leu  
 100 105 110  
 Val Val Arg Tyr Thr Pro Arg Val Leu Glu Glu Met Glu Ala Arg Phe  
 115 120 125  
 Glu Lys Met Arg Ser Ala Arg Arg Gln Gln His Gln Ser Tyr Ser  
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 Ser Leu Glu Ser Arg Gly  
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<210> 6257  
 <211> 2216  
 <212> DNA  
 <213> Homo sapiens

<400> 6257  
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 180

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240  
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300  
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360  
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420  
gtcatggggg ggctgcagta ggggtggtca ttgtgcaggc tgagttgaga gaagtgggtg  
480  
gccatgttct cctcagacag aaactgcttg cgcagaggct cctgctctc ctccaggcgc  
540  
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600  
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660  
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720  
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780  
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cgtcgcgcgc ggagcactct gggacttgta gttctggaga tggagcgagc tgtgccgctc  
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1200  
attgccatct tcagcttgct ctctgctttg agctcagaag ccaaagagga aagtaagaag  
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1380  
aagggtgta aggagctgtg gcgtcgtcag cctccataca ggaccagcct ggaagtgcct  
1440  
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1800

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 1980  
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&lt;210&gt; 6258

&lt;211&gt; 340

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6258

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Ser	Pro	Cys	Gly	Lys	Phe	Leu	Ala	Ala	Gly	Asn	Asn	Tyr	Gly	Gln	Ile
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Ala	Ile	Phe	Ser	Leu	Ser	Ser	Ala	Leu	Ser	Ser	Glu	Ala	Lys	Glu	Glu
	50				55						60				
Ser	Lys	Lys	Pro	Val	Val	Thr	Phe	Gln	Ala	His	Asp	Gly	Pro	Val	Tyr
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Ser	Met	Val	Ser	Thr	Asp	Arg	His	Leu	Leu	Ser	Ala	Gly	Asp	Gly	Glu
			85					90						95	
Val	Lys	Ala	Trp	Leu	Trp	Ala	Glu	Met	Leu	Lys	Lys	Gly	Cys	Lys	Glu
		100					105						110		
Leu	Trp	Arg	Arg	Gln	Pro	Pro	Tyr	Arg	Thr	Ser	Leu	Glu	Val	Pro	Glu
	115					120						125			
Ile	Asn	Ala	Leu	Leu	Leu	Val	Pro	Lys	Glu	Asn	Ser	Leu	Ile	Leu	Ala
	130				135						140				
Gly	Gly	Asp	Cys	Gln	Leu	His	Thr	Met	Asp	Leu	Glu	Thr	Gly	Thr	Phe
145				150				155						160	
Thr	Arg	Val	Leu	Arg	Gly	His	Thr	Asp	Tyr	Ile	His	Cys	Leu	Ala	Leu
		165					170						175		
Arg	Glu	Arg	Ser	Pro	Glu	Val	Leu	Ser	Gly	Gly	Glu	Asp	Gly	Ala	Val
	180						185						190		
Arg	Leu	Trp	Asp	Leu	Arg	Thr	Ala	Lys	Glu	Val	Gln	Thr	Ile	Glu	Ser
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Ile	Ser	Thr	Arg	Ser	Ala	Arg	Gly	Pro	Thr	Met	Gly	Ala	Gly	Leu	Asp
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Val	Trp	Thr	Asp	Ser	Asp	Trp	Met	Val	Cys	Gly	Gly	Gly	Pro	Ala	Leu
225				230					235					240	
Thr	Leu	Trp	His	Leu	Arg	Ser	Ser	Thr	Pro	Thr	Thr	Ile	Phe	Pro	Ile
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<400> 6260															
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			20					25					30		
Gln	Lys	Asn	Glu	Lys	Ile	Lys	Tyr	Ser	Arg	Phe	Ala	Ala	Thr	Asn	Thr
		35					40					45			
Arg	Val	Lys	Ala	Lys	Gln	Lys	Pro	Leu	Ile	Ser	Asn	Ser	His	Thr	Asp
	50					55					60				
His	Leu	Met	Gly	Cys	Thr	Lys	Ser	Ala	Glu	Pro	Gly	Thr	Glu	Thr	Ser
65					70					75					80
Gln	Val	Asn	Ser	Phe	Ser	Asp	Leu	Lys	Ala	Ser	Thr	Leu	Val	His	Lys
				85					90					95	
Pro	Gln	Ser	Asp	Phe	Thr	Asn	Asp	Ala	Leu	Ser	Pro	Lys	Phe	Asn	Leu
			100					105					110		
Ser	Ser	Ser	Ile	Ser	Ser	Glu	Asn	Ser	Leu	Ile	Lys	Gly	Gly	Ala	Ala

115

120

125

&lt;210&gt; 6261

&lt;211&gt; 3619

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6261

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120

ggcccgggcc attttccggg ccgggcgcac taaggcgccg ggccccgggg ccagtatat  
180

gacccgccgt cctgctatcc ttcgcttccc ccgccccatg tggtcgccgg gccgcggcgg  
240

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300

gagctgggag cgacgctcat gggcccgccg tttggctggg atcactcgct tcacaaaagg  
360

aaaagacttc ctctgtgaa gagatcctta gtatactact tgaagaaccg ggaagtcagg  
420

ctacagaatg aaaccagcta ctctcgagtg ttgcatgggt atgcagcaca gcaacttccc  
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agtctcctga aggagagaga gtttcacctt gggaccctta ataaagtgtt tgcattctag  
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660

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960

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1140

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1200

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1740  
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&lt;210&gt; 6262

&lt;211&gt; 431

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6262

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Leu	Pro	Pro	Val	Lys	Arg	Ser	Leu	Val	Tyr	Tyr	Leu	Lys	Asn	Arg	Glu
			20					25					30		
Val	Arg	Leu	Gln	Asn	Glu	Thr	Ser	Tyr	Ser	Arg	Val	Leu	His	Gly	Tyr
			35				40					45			
Ala	Ala	Gln	Gln	Leu	Pro	Ser	Leu	Leu	Lys	Glu	Arg	Glu	Phe	His	Leu
	50					55				60					
Gly	Thr	Leu	Asn	Lys	Val	Phe	Ala	Ser	Gln	Trp	Leu	Asn	His	Arg	Gln
65					70					75				80	
Val	Val	Cys	Gly	Thr	Lys	Cys	Asn	Thr	Leu	Phe	Val	Val	Asp	Val	Gln
			85					90					95		
Thr	Ser	Gln	Ile	Thr	Lys	Ile	Pro	Ile	Leu	Lys	Asp	Arg	Glu	Pro	Gly
			100					105					110		
Gly	Val	Thr	Gln	Gln	Gly	Cys	Gly	Ile	His	Ala	Ile	Glu	Leu	Asn	Pro
		115					120					125			
Ser	Arg	Thr	Leu	Leu	Ala	Thr	Gly	Gly	Asp	Asn	Pro	Asn	Ser	Leu	Ala
		130				135					140				
Ile	Tyr	Arg	Leu	Pro	Thr	Leu	Asp	Pro	Val	Cys	Val	Gly	Asp	Asp	Gly
145				150					155					160	
His	Lys	Asp	Trp	Ile	Phe	Ser	Ile	Ala	Trp	Ile	Ser	Asp	Thr	Met	Ala
			165					170						175	
Val	Ser	Gly	Ser	Arg	Asp	Gly	Ser	Met	Gly	Leu	Trp	Glu	Val	Thr	Asp
			180					185					190		
Asp	Val	Leu	Thr	Lys	Ser	Asp	Ala	Arg	His	Asn	Val	Ser	Arg	Val	Pro

	195		200		205										
Val	Tyr	Ala	His	Ile	Thr	His	Lys	Ala	Leu	Lys	Asp	Ile	Pro	Lys	Glu
	210					215					220				
Asp	Thr	Asn	Pro	Asp	Asn	Cys	Lys	Val	Arg	Ala	Leu	Ala	Phe	Asn	Asn
225					230					235				240	
Lys	Asn	Lys	Glu	Leu	Gly	Ala	Val	Ser	Leu	Asp	Gly	Tyr	Phe	His	Leu
				245					250					255	
Trp	Lys	Ala	Glu	Asn	Thr	Leu	Ser	Lys	Leu	Leu	Ser	Thr	Lys	Leu	Pro
			260					265					270		
Tyr	Cys	Arg	Glu	Asn	Val	Cys	Leu	Ala	Tyr	Gly	Ser	Glu	Trp	Ser	Val
	275						280					285			
Tyr	Ala	Val	Gly	Ser	Gln	Ala	His	Val	Ser	Phe	Leu	Asp	Pro	Arg	Gln
	290					295					300				
Pro	Ser	Tyr	Asn	Val	Lys	Ser	Val	Cys	Ser	Arg	Glu	Arg	Gly	Ser	Gly
305					310					315				320	
Ile	Arg	Ser	Val	Ser	Phe	Tyr	Glu	His	Ile	Ile	Thr	Val	Gly	Thr	Gly
				325				330						335	
Gln	Gly	Ser	Leu	Leu	Phe	Tyr	Asp	Ile	Arg	Ala	Gln	Arg	Phe	Leu	Glu
			340				345					350			
Glu	Arg	Leu	Ser	Ala	Cys	Tyr	Gly	Ser	Lys	Pro	Arg	Leu	Ala	Gly	Glu
	355						360				365				
Asn	Leu	Lys	Leu	Thr	Thr	Gly	Lys	Gly	Trp	Leu	Asn	His	Asp	Glu	Thr
	370				375					380					
Trp	Arg	Asn	Tyr	Phe	Ser	Asp	Ile	Asp	Phe	Phe	Pro	Asn	Ala	Val	Tyr
385					390				395					400	
Thr	His	Cys	Tyr	Asp	Ser	Ser	Gly	Thr	Lys	Leu	Phe	Val	Ala	Gly	Gly
				405				410					415		
Pro	Leu	Pro	Ser	Gly	Leu	His	Gly	Asn	Tyr	Ala	Gly	Leu	Trp	Ser	
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&lt;210&gt; 6263

&lt;211&gt; 2508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6263

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180  
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240  
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1980  
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2160

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<210> 6264

<211> 654

<212> PRT

<213> Homo sapiens

<400> 6264

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Cys	Thr	Gly	Ile	Glu	Asn	Ile	Asp	Glu	Ala	Ile	Thr	Leu	Leu	Glu	Gln
			20					25					30		
Asn	Asn	Trp	Asp	Leu	Val	Ala	Ala	Ile	Asn	Gly	Val	Ile	Pro	Gln	Glu
		35					40					45			
Asn	Gly	Ile	Leu	Gln	Ser	Glu	Tyr	Gly	Gly	Glu	Thr	Ile	Pro	Gly	Pro
	50					55					60				
Ala	Phe	Asn	Pro	Ala	Ser	His	Pro	Ala	Ser	Ala	Pro	Thr	Ser	Ser	Ser
65					70					75				80	
Ser	Ser	Ala	Phe	Arg	Pro	Val	Met	Pro	Ser	Arg	Gln	Ile	Val	Glu	Arg
				85					90					95	
Gln	Pro	Arg	Met	Leu	Asp	Phe	Arg	Val	Glu	Tyr	Arg	Asp	Arg	Asn	Val
			100					105					110		
Asp	Val	Val	Leu	Glu	Asp	Thr	Cys	Thr	Val	Gly	Glu	Ile	Lys	Gln	Ile
		115					120					125			
Leu	Glu	Asn	Glu	Leu	Gln	Ile	Pro	Val	Ser	Lys	Met	Leu	Leu	Lys	Gly
	130					135					140				
Trp	Lys	Thr	Gly	Asp	Val	Glu	Asp	Ser	Thr	Val	Leu	Lys	Ser	Leu	His
145					150					155				160	
Leu	Pro	Lys	Asn	Asn	Ser	Leu	Tyr	Val	Leu	Thr	Pro	Asp	Leu	Pro	Pro
			165						170					175	
Pro	Ser	Ser	Ser	Ser	His	Ala	Gly	Ala	Leu	Gln	Glu	Ser	Leu	Asn	Gln
			180					185					190		
Asn	Phe	Met	Leu	Ile	Ile	Thr	His	Arg	Glu	Val	Gln	Arg	Glu	Tyr	Asn
		195					200					205			
Leu	Asn	Phe	Ser	Gly	Ser	Ser	Thr	Ile	Gln	Glu	Val	Lys	Arg	Asn	Val
	210					215					220				
Tyr	Asp	Leu	Thr	Ser	Ile	Pro	Val	Arg	His	Gln	Leu	Trp	Glu	Gly	Trp
225					230					235				240	
Pro	Thr	Ser	Ala	Thr	Asp	Asp	Ser	Met	Cys	Leu	Ala	Glu	Ser	Gly	Leu
			245						250					255	
Ser	Tyr	Pro	Cys	His	Arg	Leu	Thr	Val	Gly	Arg	Arg	Ser	Ser	Pro	Ala
			260					265					270		
Gln	Thr	Arg	Glu	Gln	Ser	Glu	Glu	Gln	Ile	Thr	Asp	Val	His	Met	Val

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      275      280      285
Ser Asp Ser Asp Gly Asp Asp Phe Glu Asp Ala Thr Glu Phe Gly Val
  290      295      300
Asp Asp Gly Glu Val Phe Gly Met Ala Ser Ser Ala Leu Arg Lys Ser
 305      310      315      320
Pro Met Ile Cys Phe Leu Val Pro Glu Asn Ala Glu Asn Glu Gly Asp
      325      330      335
Ala Leu Leu Gln Phe Thr Ala Glu Phe Ser Ser Arg Tyr Gly Asp Cys
      340      345      350
His Pro Val Phe Phe Ile Gly Ser Leu Glu Ala Ala Phe Gln Glu Ala
      355      360      365
Phe Tyr Val Lys Ala Arg Asp Arg Lys Leu Leu Ala Ile Tyr Leu His
      370      375      380
His Asp Glu Ser Val Leu Thr Asn Val Phe Cys Ser Gln Met Leu Cys
 385      390      395      400
Ala Glu Ser Ile Val Ser Tyr Leu Ser Gln Asn Phe Ile Thr Trp Ala
      405      410      415
Trp Asp Leu Thr Lys Asp Ser Asn Arg Ala Arg Phe Leu Thr Met Cys
      420      425      430
Asn Arg His Phe Gly Ser Val Val Ala Gln Thr Ile Arg Thr Gln Lys
      435      440      445
Thr Asp Gln Phe Pro Leu Phe Leu Ile Ile Met Gly Lys Arg Ser Ser
      450      455      460
Asn Glu Val Leu Asn Val Ile Gln Gly Asn Thr Thr Val Asp Glu Leu
 465      470      475      480
Met Met Arg Leu Met Ala Ala Met Glu Ile Phe Thr Ala Gln Gln Gln
      485      490      495
Glu Asp Ile Lys Asp Glu Asp Glu Arg Glu Ala Arg Glu Asn Val Lys
      500      505      510
Arg Glu Gln Asp Glu Ala Tyr Arg Leu Ser Leu Glu Ala Asp Arg Ala
      515      520      525
Lys Arg Glu Ala His Glu Arg Glu Met Ala Glu Gln Phe Arg Leu Glu
      530      535      540
Gln Ile Arg Lys Glu Gln Glu Glu Glu Arg Glu Ala Ile Arg Leu Ser
 545      550      555      560
Leu Glu Gln Ala Leu Pro Pro Glu Pro Lys Glu Glu Asn Ala Glu Pro
      565      570      575
Val Ser Lys Leu Arg Ile Arg Thr Pro Ser Gly Glu Phe Leu Glu Arg
      580      585      590
Arg Phe Leu Ala Ser Asn Lys Leu Gln Ile Val Phe Asp Phe Val Ala
      595      600      605
Ser Lys Gly Phe Pro Trp Asp Glu Tyr Lys Leu Leu Ser Thr Phe Pro
      610      615      620
Arg Arg Asp Val Thr Gln Leu Asp Pro Asn Lys Ser Leu Leu Glu Val
 625      630      635      640
Lys Leu Phe Pro Gln Glu Thr Leu Phe Leu Glu Ala Lys Glu
      645      650

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&lt;210&gt; 6265

&lt;211&gt; 1344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6265

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aacacctctg gtagtggaac aattcttata gatctgtctc ctgatgataa agagtttcag  
120  
tctgtggagg aagagatgca aagtacagtt cgagagcaca gagatggagg tcatgcaggt  
180  
ggaatcttca acagatacaa tattctcaag attcagaagg tttgtaacaa gaaactatgg  
240  
gaaagataca ctcaccggag aaaagaagtt tctgaagaaa accacaacca tgccaatgaa  
300  
cgaatgctat ttcattgggtc tccttttgtg aatgcaatta tccacaaagg ctttgatgaa  
360  
aggcatgcgt acatagggtg tatgtttgga gctggcattt attttgctga aaactcttcc  
420  
aaaagcaatc aatatgtata tggaattgga ggaggtactg ggtgtccagt tcacaaagac  
480  
agatcttgtt acatttgcca caggcagctg ctcttttgcc gggtaacctt gggaaagtct  
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600  
ggtaggccca gtgtaaatgg cctagcatta gctgaatatg ttatttacag aggagaacag  
660  
gcttatcctg agtatttaat tacttaccag attatgaggc ctgaagggtat ggtcgaaggaa  
720  
taaatagtta ttttaagaaa ctaattccac tgaacctaaa atcatcaaag cagcagtggc  
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960  
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1020  
tctaacaac tgtaatgcc tcaacagaac taattttact aatacaatac tgtgttcttt  
1080  
aaaacacagc atttacactg aatacaattt catttgtaaa actgtaaata agagcttttg  
1140  
tactagccca gtattttatt acattgcttt gtaatatata tctgttttag aactgcagcg  
1200  
gtttacaaaa ttttttcata tgtattgttc atctatactt catcttacat cgtcatgatt  
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gagtgatctt tacatttgat tccagaggct atgttcagtt gttagttggg aaagattgag  
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1344

&lt;210&gt; 6266

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6266

Xaa Ala Leu Pro Ala Ser His Arg Pro Gly Gln Gln Gly Leu Asn Pro

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Tyr Leu Thr Leu Asn Thr Ser Gly Ser Gly Thr Ile Leu Ile Asp Leu			
20	25	30	
Ser Pro Asp Asp Lys Glu Phe Gln Ser Val Glu Glu Glu Met Gln Ser			
35	40	45	
Thr Val Arg Glu His Arg Asp Gly Gly His Ala Gly Gly Ile Phe Asn			
50	55	60	
Arg Tyr Asn Ile Leu Lys Ile Gln Lys Val Cys Asn Lys Lys Leu Trp			
65	70	75	80
Glu Arg Tyr Thr His Arg Arg Lys Glu Val Ser Glu Glu Asn His Asn			
85	90	95	
His Ala Asn Glu Arg Met Leu Phe His Gly Ser Pro Phe Val Asn Ala			
100	105	110	
Ile Ile His Lys Gly Phe Asp Glu Arg His Ala Tyr Ile Gly Gly Met			
115	120	125	
Phe Gly Ala Gly Ile Tyr Phe Ala Glu Asn Ser Ser Lys Ser Asn Gln			
130	135	140	
Tyr Val Tyr Gly Ile Gly Gly Gly Thr Gly Cys Pro Val His Lys Asp			
145	150	155	160
Arg Ser Cys Tyr Ile Cys His Arg Gln Leu Leu Phe Cys Arg Val Thr			
165	170	175	
Leu Gly Lys Ser Phe Leu Gln Phe Ser Ala Met Lys Met Ala His Ser			
180	185	190	
Pro Pro Gly His His Ser Val Thr Gly Arg Pro Ser Val Asn Gly Leu			
195	200	205	
Ala Leu Ala Glu Tyr Val Ile Tyr Arg Gly Glu Gln Ala Tyr Pro Glu			
210	215	220	
Tyr Leu Ile Thr Tyr Gln Ile Met Arg Pro Glu Gly Met Val Asp Gly			
225	230	235	240

&lt;210&gt; 6267

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6267

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gggagagggg agggctaagc agagtgggga tgcccggcag tgaccagacc tctctcccca  
120

gatgagcctt tctgcagtt ccgaaggaac gtgttcttcc caaagcggcg ggagctccag  
180

atccatgacg aggaggtcct gcggtctgctc tatgaggagg ccaagggcaa cgtgctggct  
240

gcacggtacc cgtgcgacgt ggaggactgc gaggtctctgg gcgccctggt gtgccgcgtg  
300

cagcttgggc cctaccagcc cggccggc  
328

&lt;210&gt; 6268

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6268

Ala Glu Trp Gly Cys Pro Ala Val Thr Gln Pro Leu Ser Pro Asp Glu  
 1 5 10 15  
 Pro Phe Leu Gln Phe Arg Arg Asn Val Phe Phe Pro Lys Arg Arg Glu  
 20 25 30  
 Leu Gln Ile His Asp Glu Glu Val Leu Arg Leu Leu Tyr Glu Glu Ala  
 35 40 45  
 Lys Gly Asn Val Leu Ala Ala Arg Tyr Pro Cys Asp Val Glu Asp Cys  
 50 55 60  
 Glu Ala Leu Gly Ala Leu Val Cys Arg Val Gln Leu Gly Pro Tyr Gln  
 65 70 75 80  
 Pro Gly Arg

&lt;210&gt; 6269

&lt;211&gt; 923

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6269

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 480  
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 923

&lt;210&gt; 6270

<211> 307  
 <212> PRT  
 <213> Homo sapiens

<400> 6270

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Glu Glu Leu Ile His Gln Leu Arg Asn Val Met Val Leu Gln Asp Glu
          35          40          45
Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
          50          55          60
Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
65          70          75          80
Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
          85          90          95
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
          100         105         110
Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
          115         120         125
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
          130         135         140
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
145         150         155         160
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
          165         170         175
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
          180         185         190
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
          195         200         205
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
          210         215         220
Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
225         230         235         240
Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
          245         250         255
Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
          260         265         270
Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
          275         280         285
Ile Asn Ser Pro Gly Tyr Pro Val Ile Phe His Pro Thr Pro Ser Val
          290         295         300
Leu Val Asn
305

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<210> 6271  
 <211> 1437  
 <212> DNA  
 <213> Homo sapiens

<400> 6271

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180  
agtggagctg gaatggtgag accaacaatcc gtgacacctg gactctttca ggttctgaag  
240  
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420  
aagcagatga atacactcca gtgtgctcgt tacgtttacc agaccgaagg cattcgtggc  
480  
ttctatagag gattaactgc ctctgtatgct ggaatttccg aaactataat ctgctttgct  
540  
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1380  
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1437

&lt;210&gt; 6272

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6272

Xaa Met Ala Thr Gly Gly Gln Gln Lys Glu Asn Thr Leu Leu His Leu



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      20             25             30
Leu Glu Val Ile Lys Thr Arg Leu Gln Ser Ser Arg Leu Ala Leu Arg
      35             40             45
Thr Val Tyr Tyr Pro Gln Val His Leu Gly Thr Ile Ser Gly Ala Gly
      50             55             60
Met Val Arg Pro Thr Ser Val Thr Pro Gly Leu Phe Gln Val Leu Lys
      65             70             75
Ala Val Tyr Phe Ala Cys Tyr Ser Lys Ala Lys Glu Gln Phe Asn Gly
      85             90             95
Ile Phe Val Pro Asn Ser Asn Ile Val His Leu Phe Ser Ala Gly Ser
      100            105            110
Ala Ala Phe Ile Thr Asn Ser Leu Met Asn Pro Ile Trp Met Val Lys
      115            120            125
Thr Arg Met Gln Leu Glu Gln Lys Val Arg Gly Ser Lys Gln Met Asn
      130            135            140
Thr Leu Gln Cys Ala Arg Tyr Val Tyr Gln Thr Glu Gly Ile Arg Gly
      145            150            155
Phe Tyr Arg Gly Leu Thr Ala Ser Tyr Ala Gly Ile Ser Glu Thr Ile
      165            170            175
Ile Cys Phe Ala Ile Tyr Glu Ser Leu Lys Lys Tyr Leu Lys Glu Ala
      180            185            190
Pro Leu Ala Ser Ser Ala Asn Gly Thr Glu Lys Asn Ser Thr Ser Phe
      195            200            205
Phe Gly Leu Met Ala Ala Ala Leu Ser Lys Gly Cys Ala Ser Cys
      210            215            220
Ile Ala Tyr Pro His Glu Val Ile Arg Thr Arg Leu Arg Glu Glu Gly
      225            230            235
Thr Lys Tyr Lys Ser Phe Val Gln Thr Ala Arg Leu Val Phe Arg Glu
      245            250            255
Glu Gly Tyr Leu Ala Phe Tyr Arg Gly Leu Phe Ala Gln Leu Ile Arg
      260            265            270
Gln Ile Pro Asn Thr Ala Ile Val Leu Ser Thr Tyr Glu Leu Ile Val
      275            280            285
Tyr Leu Leu Glu Asp Arg Thr Gln
      290            295

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&lt;210&gt; 6273

&lt;211&gt; 2355

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6273

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&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6276

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&lt;211&gt; 1206

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6277

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<211> 399

<212> PRT

<213> Homo sapiens

<400> 6278

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&lt;210&gt; 6279

&lt;211&gt; 2795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6279

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 Arg Ser Glu Lys Cys Ser Leu Gln Ala Ala Ala Ile Leu Asp Ala Asn  
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 Asp Ala His Gln Thr Glu Thr Ser Ser Ser Gln Val Lys Asp Asn Lys  
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 Thr Lys Gln Ala Asn Leu Val His Phe Pro Pro Gly Phe Gln Pro Ile  
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 Pro Cys Lys Pro Leu Phe Phe Asp Leu Ala Leu Asn His Val Ala Phe  
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 Pro Pro Leu Glu Asp Lys Leu Glu Gln Lys Thr Lys Ser Gly Leu Thr  
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&lt;210&gt; 6281

&lt;211&gt; 741

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6281

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 <212> PRT  
 <213> Homo sapiens

<400> 6282  
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 115 120 125  
 Ser Arg Arg Leu Glu Ala Gly Tyr Gln Ile Ala Val Glu Thr Gly Glu  
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<210> 6283  
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 <212> DNA  
 <213> Homo sapiens

<400> 6283  
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<210> 6284  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 6284  
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 Lys Pro Ile His Val Phe Phe Gly Ala Ala Ile Leu Ser Leu Ser Ile  
 35 40 45  
 Ala Ser Val Ile Ser Gly Ile Asn Glu Lys Leu Phe Phe Ser Leu Lys  
 50 55 60  
 Asn Thr Thr Arg Pro Tyr His Ser Leu Pro Ser Glu Ala Val Phe Ala  
 65 70 75 80  
 Asn Ser Thr Gly Met Leu Val Val Ala Phe Gly Leu Leu Val Leu Tyr  
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<210> 6285  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 6286

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6286

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Ser	Cys	Gly	Gln	His	Glu	Gln	Gln	Ile	Pro	Pro	Asp	His	His	Lys	Asp
		20						25				30			
Ala	Gly	Asn	Ile	Tyr	Leu	Gly	Thr	Ser	Pro	Pro	Ser	Gln	Glu	Pro	Ser
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Ser	Pro	Trp	Ala	Ser	Trp	His	Arg	Ser							
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&lt;210&gt; 6287

&lt;211&gt; 1674

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6287

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1674

&lt;210&gt; 6288



<211> 269  
 <212> PRT  
 <213> Homo sapiens

<400> 6288  
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 35 40 45  
 Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile  
 50 55 60  
 Asn Ser Ile Ser Lys Leu Thr Gln Leu Thr Gln Ser Ser Met Tyr Ser  
 65 70 75 80  
 Leu Pro Asn Ala Pro Thr Leu Ala Asp Leu Glu Asp Asp Thr His Glu  
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 Ala Ser Asp Asp Gln Pro Glu Lys Pro His Phe Asp Ser Arg Ser Val  
 100 105 110  
 Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val  
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 Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe  
 130 135 140  
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 Met Tyr Lys Pro Ile Thr Tyr Asn Thr Asn Leu Leu Thr Glu Glu Thr  
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 210 215 220  
 Asn Lys Ile Val Ile Pro Lys Lys Lys Gly Pro Val Gln Pro Ala Gly  
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<210> 6289  
 <211> 1321  
 <212> DNA  
 <213> Homo sapiens

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 1321

&lt;210&gt; 6290

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6290

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			20					25						30	
Ser	Pro	Asp	Glu	Gly	Leu	Ile	Glu	Asp	Leu	Thr	Ile	Glu	Asp	Lys	Ala
			35				40					45			
Val	Glu	Gln	Leu	Ala	Glu	Gly	Leu	Leu	Ser	His	Tyr	Leu	Pro	Asp	Leu
	50					55					60				
Gln	Arg	Ser	Lys	Gln	Ala	Leu	Gln	Glu	Leu	Thr	Gln	Asn	Gln	Val	Val

65					70					75					80
Leu	Leu	Asp	Thr	Leu	Glu	Gln	Glu	Ile	Ser	Lys	Phe	Lys	Glu	Cys	His
				85					90					95	
Ser	Met	Leu	Asp	Ile	Asn	Ala	Leu	Phe	Ala	Glu	Ala	Lys	His	Tyr	His
			100					105					110		
Ala	Lys	Leu	Val	Asn	Ile	Arg	Lys	Glu	Met	Leu	Met	Leu	His	Glu	Lys
		115					120					125			
Thr	Ser	Lys	Leu	Lys	Lys	Arg	Ala	Leu	Lys	Leu	Gln	Gln	Lys	Arg	Gln
	130					135					140				
Lys	Glu	Glu	Leu	Glu	Arg	Glu	Gln	Gln	Arg	Glu	Lys	Gly	Phe	Glu	Arg
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&lt;210&gt; 6291

&lt;211&gt; 2718

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6291

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<210> 6292

<211> 497

<212> PRT

<213> Homo sapiens

<400> 6292

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Leu	Ser	Arg	Pro	Gln	Pro	Pro	Pro	Asp	Pro	Leu	Leu	Leu	Gln	Arg	Leu
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Leu	Asp	Ser	Ser	Arg	Cys	Leu	Met	Gln	Gln	Gly	Ile	Lys	Ala	Gly	Asp
65				70				75						80	
Ala	Leu	Trp	Leu	Arg	Phe	Lys	Tyr	Tyr	Ser	Phe	Phe	Asp	Leu	Asp	Pro
		85						90					95		
Lys	Thr	Asp	Pro	Val	Arg	Leu	Thr	Gln	Leu	Tyr	Glu	Gln	Ala	Arg	Trp
		100						105					110		
Asp	Leu	Leu	Leu	Glu	Glu	Ile	Asp	Cys	Thr	Glu	Glu	Glu	Met	Met	Val
	115					120						125			
Phe	Ala	Ala	Leu	Gln	Tyr	His	Ile	Asn	Lys	Leu	Ser	Gln	Ser	Gly	Glu
	130					135					140				
Val	Gly	Glu	Pro	Ala	Gly	Thr	Asp	Pro	Gly	Leu	Asp	Asp	Leu	Asp	Val
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			165					170					175		
Val	Leu	Asp	Ser	Leu	Thr	Thr	Ile	Pro	Glu	Leu	Lys	Asp	Tyr	Leu	Arg
		180						185					190		
Ile	Phe	Arg	Pro	Arg	Lys	Leu	Thr	Leu	Lys	Gly	Tyr	Arg	Gln	His	Trp
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Val	Val	Phe	Lys	Glu	Thr	Thr	Leu	Ser	Tyr	Tyr	Lys	Ser	Gln	Asp	Glu
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Val	Pro	Ser	Pro	Glu	Gly	Met	Ser	Glu	Ile	Tyr	Leu	Arg	Cys	Gln	Asp
		260						265					270		
Glu	Gln	Gln	Tyr	Ala	Arg	Trp	Met	Ala	Gly	Cys	Arg	Leu	Ala	Ser	Lys
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Gly	Arg	Thr	Met	Ala	Asp	Ser	Ser	Tyr	Thr	Ser	Glu	Val	Gln	Ala	Ile
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Leu	Ala	Phe	Leu	Ser	Leu	Gln	His	Gly	Gln	Trp	Gly	Pro	Arg	Gln	Pro
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Pro	Pro	Arg	Pro	Asp	Ala	Ser	Ala	Glu	Gly	Leu	Asn	Pro	Tyr	Gly	Leu
			325					330						335	
Val	Ala	Pro	Arg	Phe	Gln	Arg	Lys	Phe	Lys	Ala	Lys	Gln	Leu	Thr	Pro

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 Ala Gln Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu Pro Asp Phe Gly  
 370 375 380  
 Ile Ser Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp Glu Ile  
 385 390 395 400  
 Leu Gly Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala Val Gly  
 405 410 415  
 Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp Asn Val  
 420 425 430  
 Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe Asp Glu His Ile Asn  
 435 440 445  
 Val Ala Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His Glu Tyr  
 450 455 460  
 Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg Glu Arg Ala Arg Gly Glu  
 465 470 475 480  
 Glu Leu Asp Glu Asp Leu Phe Leu Gln Leu Thr Gly Gly His Glu Ala  
 485 490 495  
 Phe

&lt;210&gt; 6293

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6293

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 660  
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<210> 6294  
 <211> 250  
 <212> PRT  
 <213> Homo sapiens

<400> 6294  
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 Gly Gly Thr Ala Ile Ala Gly Ser Val Glu Ala Val Ala Arg Leu Lys  
 35 40 45  
 Arg Ser Arg Leu Lys Val Arg Phe Cys Thr Asn Glu Ser Gln Lys Ser  
 50 55 60  
 Arg Ala Glu Leu Val Gly Gln Leu Gln Arg Leu Gly Phe Asp Ile Ser  
 65 70 75 80  
 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Ala Cys Gln Ile Leu Lys  
 85 90 95  
 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser  
 100 105 110  
 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala  
 115 120 125  
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln  
 130 135 140  
 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly  
 145 150 155 160  
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr  
 165 170 175  
 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly  
 180 185 190  
 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val  
 195 200 205  
 Glu Ala His Gln Ala Val Met Ile Gly Asp Asp Ile Val Gly Asp Val  
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 Gly Gly Ala Gln Arg Cys Gly Met Arg Ala Leu Gln Val Arg Thr Gly  
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 Lys Phe Arg Pro Ser Asp Glu His His Pro  
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<210> 6295  
 <211> 2091  
 <212> DNA  
 <213> Homo sapiens

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 240

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300  
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480  
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1860



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<210> 6296

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6296

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Ala	Cys	Gly	Cys	Arg	Leu	Val	Leu	Gly	Gly	Arg	Asp	Asp	Val	Ser	Ala
		35					40					45			
Gly	Leu	Arg	Gly	Ser	His	Gly	Ala	Arg	Gly	Glu	Pro	Leu	Asp	Pro	Ala
	50					55					60				
Arg	Pro	Leu	Gln	Arg	Pro	Pro	Arg	Pro	Glu	Val	Pro	Arg	Ala	Phe	Arg
65					70					75					80
Arg	Gln	Pro	Arg	Ala	Ala	Ala	Pro	Ser	Phe	Phe	Phe	Ser	Ser	Ile	Lys
				85					90					95	
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			100					105					110		
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Gly	Ala	Gly	Ile	Ser	Thr	Pro	Ser	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro
145					150					155					160
Gly	Ser	Gly	Leu	Tyr	Ser	Asn	Leu	Gln	Gln	Tyr	Asp	Leu	Pro	Tyr	Pro
			165					170						175	
Glu	Ala	Ile	Phe	Glu	Leu	Pro	Phe	Phe	His	Asn	Pro	Lys	Pro	Phe	
			180					185				190			
Phe	Thr	Leu	Ala	Lys	Glu	Leu	Tyr	Pro	Gly	Asn	Tyr	Lys	Pro	Asn	Val
		195					200					205			
Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg
	210					215					220				
Leu	Tyr	Thr	Gln	Asn	Ile	Asp	Gly	Leu	Glu	Arg	Val	Ser	Gly	Ile	Pro
225					230					235					240
Ala	Ser	Lys	Leu	Val	Glu	Ala	His	Gly	Thr	Phe	Ala	Ser	Ala	Thr	Cys
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Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val
		260						265					270		
Met	Ala	Asp	Arg	Val	Pro	Arg	Cys	Pro	Val	Cys	Thr	Gly	Val	Val	Lys
		275					280					285			
Pro	Asp	Ile	Val	Phe	Phe	Gly	Glu	Pro	Leu	Pro	Gln	Arg	Phe	Leu	Leu
	290					295					300				
His	Val	Val	Asp	Phe	Pro	Met	Ala	Asp	Leu	Leu	Leu	Ile	Leu	Gly	Thr

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          325          330          335
Ser Val Pro Arg Leu Leu Ile Asn Arg Asp Leu Val Gly Pro Leu Ala
          340          345          350
Trp His Pro Arg Ser Arg Asp Val Ala Gln Leu Gly Asp Val Val His
          355          360          365
Gly Val Glu Ser Leu Val Glu Leu Leu Gly Trp Thr Glu Glu Met Arg
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Asp Leu Val Gln Arg Glu Thr Gly Lys Leu Asp Gly Pro Asp Lys
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<210> 6297  
 <211> 472  
 <212> DNA  
 <213> Homo sapiens

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120
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180
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240
gggaagtgtc tctgcgacag gtgctgcagc cagaaggtgc cgctgcggcg catgtgtctt
300
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360
tacgacaagc agctcaaagt gctcctgagc ggtaaggacg ggtgtcctgc acagtctctg
420
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472

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<210> 6298  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

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20     25     30
Pro Phe Gly Leu Glu Glu Pro Gln Trp Val Pro Asp Lys Glu Cys Arg
35     40     45
Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His
50     55     60
His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln
65     70     75     80
Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys
85     90     95
Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys

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	100		105		110										
Gln	Leu	Lys	Val	Leu	Leu	Ser	Gly	Lys	Asp	Gly	Cys	Pro	Ala	Gln	Ser
	115						120					125			
Cys	Ala	Leu	Arg	Gln	Pro	Ala	Pro	Arg	Val	Cys	Gly	Asp	Ala	Val	Gly
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Cys	Ala														
145															

&lt;210&gt; 6299

&lt;211&gt; 1466

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6299

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120
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&lt;213&gt; Homo sapiens

&lt;400&gt; 6302

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Gly Ser Leu Thr Pro Pro Val Thr Pro Pro Ile Thr Pro Ser Ser Ser
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Asp Tyr Glu Glu Ser Asp Ser Asp Glu Ser Trp Thr Thr Glu Ser Ala
100           105           110
Ile Ser Ser Glu Ala Ile Leu Ser Ser Met Cys Met Asn Gly Gly Glu
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Glu Lys Pro Phe Ala Cys Pro Val Pro Gly Cys Lys Lys Arg Tyr Lys
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Asn Val Asn Gly Ile Lys Tyr His Ala Lys Asn Gly His Arg Thr Gln
145           150           155           160
Ile Arg Val Arg Lys Pro Phe Lys Cys Arg Cys Gly Lys Ser Tyr Lys
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&lt;212&gt; DNA

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<212> PRT

<213> Homo sapiens

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&lt;211&gt; 2119

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6307

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&lt;210&gt; 6308

&lt;211&gt; 483

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6308

```

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      20          25          30
Trp Gln Ser Tyr Leu Gln Gly Gln Met Ile Ser Ala Glu Asp Cys Glu
      35          40          45
Phe Ile Gln Arg Phe Glu Met Lys Arg Ser Pro Glu Glu Lys Gln Glu
      50          55          60
Met Leu Gln Thr Glu Gly Ser Gln Cys Ala Lys Thr Phe Ile Asn Leu
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Met Thr His Ile Cys Lys Glu Gln Thr Val Gln Tyr Ile Leu Thr Met
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Val Asp Asp Met Leu Gln Glu Asn His Gln Arg Val Ser Ile Phe Phe
      100          105          110
Asp Tyr Ala Arg Cys Ser Lys Asn Thr Ala Trp Pro Tyr Phe Leu Pro
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Met Leu Asn Arg Gln Asp Pro Phe Thr Val His Met Ala Ala Arg Ile
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Ile Ala Lys Leu Ala Ala Trp Gly Lys Glu Leu Met Glu Gly Ser Asp
      145          150          155          160
Leu Asn Tyr Tyr Phe Asn Trp Ile Lys Thr Gln Leu Ser Ser Gln Lys
      165          170          175
Leu Arg Gly Ser Gly Val Ala Val Glu Thr Gly Thr Val Ser Ser Ser
      180          185          190
Asp Ser Ser Gln Tyr Val Gln Cys Val Ala Gly Cys Leu Gln Leu Met
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Leu Arg Val Asn Glu Tyr Arg Phe Ala Trp Val Glu Ala Asp Gly Val
      210          215          220
Asn Cys Ile Met Gly Val Leu Ser Asn Lys Cys Gly Phe Gln Leu Gln
      225          230          235          240
Tyr Gln Met Ile Phe Ser Ile Trp Leu Leu Ala Phe Ser Pro Gln Met
      245          250          255
Cys Glu His Leu Arg Arg Tyr Asn Ile Ile Pro Val Leu Ser Asp Ile
      260          265          270
Leu Gln Glu Ser Val Lys Glu Lys Val Thr Arg Ile Ile Leu Ala Ala
      275          280          285
Phe Arg Asn Phe Leu Glu Lys Ser Thr Glu Arg Glu Thr Arg Gln Glu
      290          295          300
Tyr Ala Leu Ala Met Ile Gln Cys Lys Val Leu Lys Gln Leu Glu Asn
      305          310          315          320
Leu Glu Gln Gln Lys Tyr Asp Asp Glu Asp Ile Ser Glu Asp Ile Lys
      325          330          335
Phe Leu Leu Glu Lys Leu Gly Glu Ser Val Gln Asp Leu Ser Ser Phe
      340          345          350
Asp Glu Tyr Ser Ser Glu Leu Lys Ser Gly Arg Leu Glu Trp Ser Pro
      355          360          365
Val His Lys Ser Glu Lys Phe Trp Arg Glu Asn Ala Val Arg Leu Asn
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Glu Lys Asn Tyr Glu Leu Leu Lys Ile Leu Thr Lys Leu Leu Glu Val
      385          390          395          400
Ser Asp Asp Pro Gln Val Leu Ala Val Ala Ala His Asp Val Gly Glu

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Tyr Val Arg His Tyr Pro Arg Gly Lys Arg Val Ile Glu Gln Leu Gly  
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 420 425 430  
 Gly Lys Gln Leu Val Met Asn His Met His His Glu Asp Gln Gln Val  
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 Arg Tyr Asn Ala Leu Leu Ala Val Gln Lys Leu Met Val His Asn Trp  
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&lt;210&gt; 6309

&lt;211&gt; 564

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6309

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&lt;210&gt; 6310

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6310

Cys Thr Pro Thr Ala Pro Gly Ser Ser Arg Pro Val Ser Leu Trp Gly  
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 Ala Gln Gly Pro His Gly Gly Arg Leu His Val Ser Gln Asp Gly Val  
 20 25 30  
 Leu Gln Glu Ala Arg Pro Leu Gly Leu Leu Val Pro Asp Ala Gly Asp  
 35 40 45  
 Leu Arg Leu Pro Glu Pro Gln Leu Leu Pro Glu Arg Arg Val Leu Ala  
 50 55 60  
 Leu Pro Val Gln Gln Arg Asp Leu Ser Ser Leu Glu Pro Pro Pro Pro

65  
Arg Phe Glu

70

75

80

&lt;210&gt; 6311

&lt;211&gt; 1548

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6311

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<211> 234

<212> PRT

<213> Homo sapiens

<400> 6312

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			20					25					30		
Leu	Asp	Glu	Tyr	Lys	Glu	Gln	Tyr	Phe	Ser	Leu	Arg	Pro	Asp	Leu	Lys
		35					40					45			
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Met	Gln	Ile	Ser	Gly	Ser	His	Ala	Lys	Pro	Gln	Gln	Pro	Ile	Phe	Val
			85					90					95		
Asn	Arg	Gly	Pro	Lys	Arg	Pro	Lys	Val	Leu	Gln	Arg	Gly	Arg	Leu	Tyr
		100					105						110		
His	Leu	Gln	Thr	Asn	Lys	Cys	Leu	Val	Ala	Gln	Gly	Arg	Pro	Ser	Gln
		115					120					125			
Lys	Gly	Gly	Leu	Val	Val	Leu	Lys	Ala	Cys	Asp	Tyr	Ser	Asp	Pro	Asn
	130					135					140				
Gln	Ile	Trp	Ile	Tyr	Asn	Glu	Glu	His	Glu	Leu	Val	Leu	Asn	Ser	Leu
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Leu	Cys	Leu	Asp	Met	Ser	Glu	Thr	Arg	Ser	Ser	Asp	Pro	Pro	Arg	Leu
			165					170						175	
Met	Lys	Cys	His	Gly	Ser	Gly	Gly	Ser	Gln	Gln	Trp	Thr	Phe	Gly	Lys
		180						185					190		
Asn	Asn	Arg	Leu	Tyr	Gln	Val	Ser	Val	Gly	Gln	Cys	Leu	Arg	Ala	Val
		195					200					205			
Asp	Pro	Leu	Gly	Gln	Lys	Gly	Ser	Val	Ala	Met	Ala	Ile	Cys	Asp	Gly
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<211> 725

<212> DNA

<213> Homo sapiens

<400> 6313

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 725

&lt;210&gt; 6314

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6314

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Arg	Ala	Glu	Arg	Glu	Ile	Ser	Lys	Met	Lys	Pro	Ser	Val	Ala	Pro	Arg
			20					25					30		
His	Pro	Ser	Thr	Asn	Ser	Leu	Leu	Arg	Glu	Gln	Ile	Ser	Leu	Tyr	Pro
		35				40					45				
Glu	Val	Lys	Gly	Glu	Ile	Ala	Arg	Lys	Asp	Glu	Lys	Leu	Leu	Ser	Phe
	50				55					60					
Leu	Lys	Asp	Val	Tyr	Val	Asp	Ser	Lys	Asp	Pro	Val	Ser	Ser	Leu	Gln
65				70						75				80	
Val	Lys	Ala	Ala	Glu	Thr	Cys	Gln	Glu	Pro	Lys	Glu	Phe	Arg	Leu	Pro
			85					90						95	
Lys	Asp	His	His	Phe	Asp	Met	Ile	Asn	Ile	Lys	Ser	Ile	Pro	Lys	Gly
			100					105					110		
Lys	Ile	Ser	Ile	Val	Glu	Ala	Leu	Thr	Leu	Leu	Asn	Asn	His	Lys	Leu
		115					120					125			
Phe	Pro	Glu	Thr	Trp	Thr	Ala	Glu	Lys	Ile	Met	Gln	Glu	Tyr	Gln	Leu
	130					135					140				
Glu	Gln	Lys	Asp	Val	Asn	Ser	Leu	Leu	Lys	Tyr	Phe	Val	Thr	Phe	Glu
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 <211> 378  
 <212> DNA  
 <213> Homo sapiens

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<210> 6316  
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 Gly His Ile Pro Glu Leu Gln Glu Tyr Val Lys Tyr Lys Tyr Ala Met  
 35 40 45  
 Asp Glu Ala Asp Glu Lys Gly Trp Phe Pro Leu His Glu Ala Val Val  
 50 55 60  
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 65 70 75 80  
 Thr Leu Trp Glu Phe Lys Thr Cys Asp Gly Glu Thr Pro Leu Thr Leu  
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<210> 6317  
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 1201

&lt;210&gt; 6318

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6318

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Leu	Arg	Ser	Arg	Gly	Cys	Leu	Arg	Ala	Gly	Ser	Ser	Ser	Trp	Tyr	Ser
			20					25					30		
Thr	Thr	Thr	Leu	Ser	Ser	Ala	Ser	Met	Ser	Trp	Ser	Ser	Ser	Ser	Ser
		35					40					45			
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Met	Gly	Ser	Ser
	50				55						60				
Gly	Thr	Phe	Thr	Ser	Pro	Glu	Cys	Arg	Cys	Leu	Tyr	Asp	Val	Lys	Pro



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ta  
1442

&lt;210&gt; 6322

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6322

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Met Ser Ser Pro Gly Leu Thr Glu Asn Ser Gln Arg Asp Pro Ser Glu
 1           5           10           15
Leu Asp Ala Glu His Ala Gln Lys Val Leu Glu Met Glu His Thr Gln
      20           25           30
Gln Met Lys Leu Lys Glu Arg Gln Lys Phe Phe Glu Glu Ala Phe Gln
      35           40           45
Gln Asp Met Glu Gln Gln Tyr Leu Ser Thr Gly Tyr Leu Gln Ile Ala
      50           55           60
Glu Arg Arg Glu Pro Ile Gly Ser Met Ser Ser Met Glu Val Asn Val
      65           70           75           80
Asp Met Leu Glu Gln Met Asp Leu Met Asp Ile Ser Asp Gln Glu Ala
      85           90           95
Leu Asp Val Phe Leu Asn Ser Gly Gly Glu Glu Asn Thr Val Leu Ser
      100          105          110
Pro Ala Leu Gly Pro Glu Ser Ser Thr Cys Gln Asn Glu Ile Thr Leu
      115          120          125
Gln Val Pro Asn Pro Ser Glu Leu Arg Ala Lys Pro Pro Ser Ser Ser
      130          135          140
Ser Thr Cys Thr Asp Ser Ala Thr Arg Asp Ile Ser Glu Gly Gly Glu
      145          150          155          160
Ser Pro Val Val Gln Ser Asp Glu Glu Glu Val Gln Val Asp Thr Ala
      165          170          175
Leu Ala Thr Ser His Thr Asp Arg Glu Ala Thr Pro Asp Gly Gly Glu
      180          185          190
Asp Ser Asp Ser
      195

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**What is claimed is:**

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ , wherein  $n$  is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ , wherein  $n$  is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ .
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 $n$ , wherein  $n$  is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least contiguous nucleotides selected from the group consisting of SEQ ID NO:2 $n$ -1, wherein  $n$  is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
  - a) the nucleic acid of claim 1;
  - b) the polypeptide of claim 10; and
  - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said



compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.

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ning of each regular issue of the PCT Gazette.*

(54) Title: NUCLEIC ACIDS INCLUDING OPEN READING FRAMES ENCODING POLYPEPTIDES; "ORFX"

(57) Abstract: The present invention provides open reading frames encoding isolated polypeptides, as well as polynucleotides en-  
coding ORFX and antibodies that immunospecifically bind to ORFX or any derivative, variant, mutant, or fragment of the ORFX  
polypeptides, polynucleotides or antibodies. The invention additionally provides methods in which the ORFX polypeptide, polynu-  
cleotide and antibody are used in detection and treatment of a broad range of pathological states, as well as to other uses.

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 00/08621

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C12N15/12 C07K14/47 C07K16/18 G01N33/56 C12Q1/68  
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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K G01N A01K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, EMBASE, MEDLINE, CAB Data, PAJ, EPO-Internal, WPI Data, STRAND

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	COLE S.T.: "Deciphering the biology of Mycobacterium tuberculosis from the complete genome sequence." NATURE, vol. 393, 11 June 1998 (1998-06-11), XP002144873 sequence	
A	LAMERDIN J.E.: "Sequence analysis of a 3.5 Mb contig in human 19p13.3 containing a serine protease gene cluster." EMEST DATABASE ENTRY, 8 February 1999 (1999-02-08), XP002144874 sequence	

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

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Authorized officer

Hix, R

# INTERNATIONAL SEARCH REPORT

Internat. Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	<p>M.D. ADAMS ET AL.: "The genome sequence of <i>Drosophila melanogaster</i>."  SCIENCE,  vol. 287, 24 March 2000 (2000-03-24),  pages 2185-2195, XP002144875  the whole document  -----</p>	6

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 00/08621

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 27 to 32 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
  
claims 1 to 32 partially

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.



## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claim : 1 to 32 partially

Isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from a group consisting of SEQ ID NO 2n wherein n is 1, oligonucleotides less than 100 nucleotides in length and comprising at least 6 contiguous nucleotides from the above sequence, polypeptides encoded by said nucleotides, antibodies that bind to said polypeptide, pharmaceutical composition comprising said polypeptide and methods of detection, screening, therapeutic uses involving said polypeptide.

2. Claim : .

Inventions 2 to 3161

claims 1 to 32 partially :

Isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from a group consisting of SEQ ID NO 2n wherein n is 2 to 3161, oligonucleotides less than 100 nucleotides in length and comprising at least 6 contiguous nucleotides from the above sequence, polypeptides encoded by said nucleotides, antibodies that bind to said polypeptide, pharmaceutical composition comprising said polypeptide and methods of detection, screening, therapeutic uses involving said polypeptide.

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